MIDDLEBURY COLLEGE

REGISTRATION CATALOGUE 1975-1976

MIDDLEBURY COLLEGE / MIDDLEBURY, VERMONT

Catalogue cover depicts Old Chapel in 1860.

1975-76 Registration Catalogue

General Information

Normal Program

The normal academic year consists of four courses in each of the Fall and Spring Terms, and one Winter Term program. R.O.T.C. courses and required Physical Education are carried as electives without credit as a course unit. No extra charge is made for these programs. Only students who have demonstrated superior ability in their academic work are permitted to take more than four courses in a term. Students who wish to take fewer or more than four courses in a Fall or Spring Term must obtain permission from the Dean of Students.

Freshman Program

All freshmen must take one of the courses in the writing program: These include all courses in English at the 100 level except EL 110, American Literature 101, one section of History 103, and approved Winter Term writing courses. The successful completion of one of these courses is a graduation requirement. Students should begin work on their Physical Education Program during the Freshman Year. Normally, only those courses numbered from 100 to 190 are open to freshmen. Freshmen enrolled in a course within a department, however, may be assigned to a more advanced course by that department upon demonstration of special proficiency. Freshmen may not elect more than one course in a subject in any one term. (AL 101 and courses in EL Freshman Writing Program may not be taken simultaneously.)

Major Concentration

In registering for the major program the student normally consults the chairman of his or her chosen department. The chairman appoints a departmental adviser who recommends a pattern of courses for the student's subsequent years.

In addition to specific courses required for a major, cognate courses may be recommended to further the student's particular academic interests or intentions. Departments offer different programs of Senior Work adjusted both to the nature of the field and to the student's needs. Basically, a department may offer as many as three units of Senior Work outside the regular course pattern. This Senior Work may consist of Independent Study (a 700 course) and/or General Examination (a 705 course), Senior Seminar (a 704 course) or Senior Course (a 710 course). Students should consult the descriptions of the Senior Work under each department for details. The Senior Work courses may be distributed over Fall, Winter, and Spring Terms. Where a Joint Major involving two or more departments is desirable a single General Examination may be required. Details should be worked out with department chairmen involved.

Should students not be satisfied with their first choice of major they may, before the beginning of the third year, change to another major. Prior to the change,

however, they should obtain assurance from the department to which the change is contemplated that they will be able to meet its major requirements. To complete a change in major, a "Major/Adviser Change Form" must be obtained at the Registrar's Office, completed, and returned to the Registrar. After the beginning of the third year students may change majors only for exceptional reasons and with the consent of the Dean of Students.

Specific course requirements for each major are listed under the Department involved. A minimum of 10 courses must be completed in the major. The Official Majors offered at Middlebury College are:

American Literature
American Studies-American Literature
American Studies-History
American Studies-Political Science
American Studies-Sociology
Art
Biology
Biology-Chemistry (Joint Major)
Chemistry
Classics
Economics
English
Environmental Studies (Biology)
Environmental Studies (Chemistry)
Environmental Studies (Economics)
Environmental Studies (Geography)
Environmental Studies (Geology)
Environmental Studies (Physics)
French
Geography
Geology
German
History
Italian
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Religion
Russian
Sociology-Anthropology
Spanish
Theatre

Joint Major: The Biology-Chemistry major (listed above) is a Joint Major. Other Joint Majors are programs that combine portions of two of the disciplines in the above list, arranged on an individual basis with the cooperation and approval of the departments concerned. These Joint Majors are official only after the required program is approved by an adviser from each department, and is on file in writing with the Registrar.

Double Major: A program in which the student fulfills the complete major requirements of two departments. An adviser from each department is required.

Degree Requirements

Details on official policies regarding Degree Requirements, Departmental Programs, Grading, etc., may be found in the latest Middlebury College Handbook.

In addition to the freshman and major requirements, certain additional requirements must be met before the Middlebury College degree is awarded.

1. To be eligible for a degree a student must successfully complete 32 Fall and Spring Term courses or their equivalent, and 4 Winter courses. No more than 14 Fall and Spring courses may be in the same department. A minimum of 10 courses must be completed in the major. Not more than 6 courses with a D grade may be applied to the degree requirement.
2. The last academic year of undergraduate work must be spent in residence in Middlebury, except as provided in approved combined plans with engineering and professional schools.
3. All students must complete the Physical Education Program.
4. Transfer students are required to complete successfully 18 courses at Middlebury, one of which must be a Winter Term course.

Special Programs

Preprofessional Programs. Students may engage in four-year preprofessional programs that prepare them for studies in medicine, dentistry, veterinary medicine, law, and business and management. These students should register with Dean Walter A. Moyer, Jr., as early as possible, and should periodically check their programs with him and with special advisers for law (Dr. Murray Dry) and business (Dr. D. K. Smith). In addition, information is available in Dean Moyer's office for students who would like to prepare themselves for specialized fields (e.g., nursing, architecture, and many others), or to undertake graduate studies following their Middlebury work.

Dual Degree Programs. There are two ways to combine studies undertaken at Middlebury with those at a professional school so that a student is eligible for both the Middlebury degree and the professional degree. These programs are possible with schools of medicine, dentistry, veterinary medicine, law, business and management, and engineering. The programs are briefly outlined below. The candidate must register with Dean Walter A. Moyer, Jr., (Adirondack House), Chairman of the Preprofessional Committee, and should consult with him concerning details of the plans.

1. Formal Plans: Formal agreements for combined plans are in effect with a limited number of schools of law, business and management, and engineering. Under these programs, if the candidate fulfills certain specified requirements, he or she may transfer to the professional school after completion of three years of work at Middlebury. When transferring to a law school or to a graduate school of business and management, the student is eligible for the Middlebury B.A. after successful completion of the first year of work at the professional school. If the student elects to transfer into a B.S. program in engineering, he or she is eligible for the Middlebury B.A. after receipt of the engineering degree. All such programs must be screened by the Preprofessional Committee of Middlebury College. In some cases a recommendation from the Preprofessional Committee will serve to automatically admit the candidate to the professional school.
2. Student Initiated Plans: It is possible for a well qualified student to make arrangements to transfer after his or her third year at Middlebury to a certified school of law, medicine, dentistry, veterinary medicine, engineering, or graduate school of business and management, and become eligible for the Middlebury B.A. In these programs it is the responsibility of the candidate to make all of the necessary arrangements for transfer, and he or she must gain acceptance by the professional school. The Preprofessional Committee will screen all such candidates and shall be responsible for verifying whether or not the professional program is fully accredited, and for determining whether or not all Middlebury requirements have been met. On the basis of this appraisal the committee will recommend or not recommend the candidate for admission to the professional school and for the Middlebury B.A. Recommendation by the committee does *not* guarantee admission to the professional school. If the candidate is recommended by the committee, and this recommendation is approved by the Administration Committee and the Faculty and Trustees of Middlebury College, he or she is eligible for the Middlebury B.A. after successful completion of the first year of study in a graduate-level program, or upon receipt of a B.S. degree in engineering.

Environmental Studies. Middlebury offers an interdisciplinary major in Environmental Studies, with Fields of Emphasis in Ecology, Environmental Chemistry,

Environmental Geology, Human Ecology, Environmental Physics, and Environmental Economics. Interested students should consult Professor H. E. Woodin, Coordinator of Environmental Studies, about specific course requirements. This program is best started in the freshman year.

Junior Year Abroad. Interested students should discuss their plans early with their faculty advisers and the Chairman, Programs Abroad Committee.

Washington Semester Program. Selected students each year spend one term in the national Washington Semester Program administered by American University. Interested students should contact Professor Paul Nelson, Political Science Department.

Exchange Programs. Middlebury has an arrangement with Berea College in Kentucky for one-to-one student exchanges during the Spring and Fall Terms. For information see the Dean of Students.

Independent Scholar Program. The purpose of this program is to allow the student of demonstrated motivation and ability to define individual educational goals and assume personal responsibility for attaining them independent of the College's normal curricular requirements. Students interested should consult the Chairman of the Independent Scholar Committee.

Teacher Education Program. Middlebury offers an interdisciplinary program of courses to prepare interested students to teach elementary or secondary school by introducing them to the appropriate areas of scholarship in history, philosophy, psychology, and sociology in addition to courses offered in Teacher Education. For a complete description of this program, see Teacher Education course listings.

American Studies. Programs are offered to provide students the opportunity to work in related aspects of American culture. The departments which serve as Core Departments for these programs are: Political Science, Sociology-Anthropology, American Literature, and History. For complete descriptions of these programs see the Program in American Studies in the course description section of this catalogue.

Departments of Instruction

All courses are given as term courses with the exception of Senior Work (700) and 500 courses in an Honors Program. These course numbers may signify on-going work, and in such event are marked "S" (Satisfactory progress) or "U" (Unsatisfactory).

Courses numbered 100-199 are usually taken by freshmen; 200-299, by sophomores; 300-399, by juniors; 400-499, by seniors. Schedules are cleared on this basis and conflicts will thus be most easily avoided by taking courses in proper sequence.

At the head of each departmental section, the major is described and the requirements for a major in that department are stated, together with recommended courses.

Prerequisites to a course are shown in parentheses. Courses not being offered in 1975-76 are bracketed. Abbreviations include: Lab., laboratory period; Lect., lecture period.

The College reserves the right, without further notice, to cancel any courses herein described, or to make any other changes in staff, fees, and courses which may be deemed necessary.

Spring Term offerings listed for the year 1975-76 may be incomplete. Departments may be consulted about the possibility of other courses. Winter Term information will be published and distributed separately.

Asian Studies at Middlebury

Several disciplines in the College offer courses dealing with Asia. While there is no formal program in Asian studies, a student may take courses both inside and outside the department in which he is a major which will give him a foundation for further work in the field, or which will simply allow him to pursue his own interests in Asia. Intensive language training at several levels in both Chinese and Japanese is offered during the summer session only, and it is strongly recommended that any student considering graduate work in East Asian studies begin his language study while still an undergraduate.

Listed below are certain of the courses now taught in the College dealing with various facets of Asia. Students interested in constructing an informal program of study around Asia should discuss their aims with the faculty members responsible for these courses; those interested in summer language study should see Mr. Clifford (History Department). Not all these courses are given every year; see the departmental sections of the catalog for further information.

AR 203	**The Art of India**	Mr. Reiff
AR 204	**The Art of China**	Mr. Reiff
AR 208	**The Art of Japan**	Mr. Reiff
GG 102	**The Developing World**	Mr. Illick
GG 317	**South and East Asia**	Mr. Illick
HI 207	**Imperial China**	Mr. Clifford
HI 208	**Modern China**	Mr. Clifford
HI 209	**Japanese History**	Mr. Clifford
HI 424	**Chinese Communism**	Mr. Clifford
PS 103	**Comparative Politics**	Mr. Rosenberg
PS 323	**Politics of Mainland Southeast Asia**	Mr. Rosenberg
PS 324	**Politics of Island Southeast Asia**	Mr. Rosenberg
RE 206	**Hinduism and Buddhism**	Mr. Nuovo
RE 312	**Zen and Mysticism**	Mr. Rockefeller
SA 335	**Chinese Society and Culture**	Mr. McCreery
SA 336	**Japanese Society and Culture**	Mr. McCreery

Interdepartmental

ID 100 **Special Freshman Seminar** Fall

Two credit course. An interdisciplinary investigation of modes of thought and methods of investigation. Special emphasis on written work. (Permission.)

Staff

ID 101 **Special Freshman Seminar** Spring

One credit course. Staff

Division of Foreign Languages

In addition to courses offered in the Departments of Classics, French, German, Russian, and Spanish and Italian, the Division of Foreign Languages offers the following courses which span the boundaries of its separate departments:

FL 301 **Greece without Western Civilization** Spring

The instructor will introduce the Greeks through their writings and careful interpretation of data without the encumbrance of what he believes to be an

essential bogus afterthought: Western Civilization. Freed from responsibility to posterity, the Greeks emerge as vastly different from us, a different people in a different world finding different solutions to some of the same problems. The purpose of the course is to show how imaginative thinking can grow out of a matrix of severe scholarship, and to expand the student's palette of social reactions. Reading: About 300 pages per week but no quizzes; lectures are roving but cover a range of topics not included in half the reading; a 3-page paper is due each Friday which will join imaginative thinking with fact and will be commented but not graded; final examination will be oral. (No prerequisites.) Mr. Harris

FL 320 Introduction to Linguistics Spring

Introduction to the systematic study of language. Examination of processes operative in phonology (sound system) and syntax from the perspective of modern linguistics. Theory will be tested by application to specific problems.

Ms. Herschensohn

FL 340 The Art and Craft of Translation Spring

A course for students in the third or fourth year of study in at least one foreign language. Difficult passages in Greek, Latin, French, and German will be studied and translated. A workshop method is used with faculty competent in the various languages serving as consultants. (Permission.) Mr. Harris

For additional courses offered in English, see also:

RU 251 Russian Literature and Culture Fall
RU 252 Russian Literature and Culture Spring
RU 351 Dostoevsky Fall
RU 352 Tolstoy Spring

Division of Humanities

HM 150 Foundations of the Western Intellectual Traditions: Antiquity to the Reformation Fall

Through a study of philosophical and theological texts we shall attempt to comprehend the basic questions and methods of Western intellectual traditions. This course is not a comprehensive history of ideas, but a study of great works in their own context and in ours. Selections from Plato, *The Bible,* Epicurus, Anselm, Thomas Aquinas, Pico, Luther, Montaigne. Mr. Bates, Mr. Nuovo, Staff

HM 160 The Origins of Modern Thought: Science, Religion, Society Spring

The 17th, 18th and early 19th centuries constitute a period of profound intellectual change and of the greatest advance in scientific thought in Western History. This course will trace the development of philosophy, religion, and ethics under the impact of this change through the study of major works of authors such as Descartes, Hobbes, Spinoza, Hume, Kant, Mill. Mr. Bates, Mr. Nuovo, Staff

American Literature

The American Literature major is expected to develop an understanding of the major figures and the chief literary movements as manifested in the writings of both major and secondary figures. The interplay between the general culture and literature and the relationship of writers to one another are emphasized.

Required for the major: AL 101 or 201 and 202; AL 301 and 302; AL 402; three other term courses in the Department; the Senior Program. Each major is

required to take at least two courses in American history and two term courses in a non-American literature, the courses to be determined in consultation with the Faculty Adviser.

The Senior Program consists in a Fall Term Seminar and a Spring Term Seminar which includes a General Examination.

Honors Program: Departmental honors are awarded on the basis of a Senior Thesis. To qualify as a candidate for honors one must have had an average of B or over for previous work in the Department. In consultation with the Faculty Adviser and with Department approval, the student will select a topic for independent investigation in the Spring of the Junior year. In the Senior year he or she will take AL 700 (Senior Research) in the Fall Term and in either the Winter or Spring Term.

An oral examination will be given on the thesis. The examination will be given by three faculty members, one of whom will ordinarily be from outside the Department. Highest Honors will be granted for a grade of A or above, High Honors for a grade of B+ or A–, Honors for a grade of B. For Honors in any of these categories the student must also have a final average of B for all work in the Department and a B on the General Examination.

Freshman Writing Program

All freshmen must elect one of the courses in the writing program: these include all courses in English at the 100 level except EL 110, American Literature 101, one section of History 103, and approved Winter Term writing courses. These are courses designed to develop and improve the skills of written communication; they are taught in sections of limited enrollment, require frequent written assignments, and proceed through close correction of papers, class discussion of both particular and general problems of writing and, as necessary, individual conferences. Satisfactory completion of one of these courses is a graduation requirement. Freshmen wishing to satisfy this requirement by taking American Literature must register for AL 101.

AL 101, 201 American Literature Fall, Spring

A study in the growth of American literature from the 17th through the first half of the 19th century, as emerging from its cultural backgrounds, and the significance of its major writers: Edwards, Franklin, Cooper, Irving, Poe, Hawthorne, Emerson, Thoreau, and others. (AL 101 satisfies freshman writing requirements.) Staff

AL 202 American Literature Fall, Spring

A study in the growth of American literature from the second half of the 19th century to the present, as emerging from its cultural backgrounds, and the significance of its major writers: Whitman, Melville, Twain, James, Crane, Faulkner, Frost, Eliot, Stevens, Hemingway, and others. (AL 101 or 201.) Staff

AL 301 The American Novel Fall

The development of the American novel: the meaning and structure of the novels of the 19th century focusing on particular novels of Cooper, Hawthorne, Melville, Twain, Howells, James, Norris, and Dreiser. (AL 202 or permission.)

Mr. Munford

AL 302 The American Novel Spring

An analysis of thematic and structural aspects in representative American novels of the 20th century with concentration on Cather, Dos Passos, Fitzgerald, Hemingway, Faulkner, Wright, Ellison, Mailer, and Bellow. (AL 301.)

Mr. Munford

AL 401 The American Short Story Spring

A study of the development of short prose fiction in America from Washington Irving to the present. The history of the short story form, techniques, and changing point of view will be considered with regard to Hawthorne, Melville, James, Crane, Fitzgerald, Hemingway, and others. (AL 202 or permission.)

Mr. Beck

AL 402 Emerson, Melville, Whitman Fall

A study in depth of selected works of three major American writers emphasizing their relationship in the context of the time. (AL 202 or permission.)

Mr. Stitt

AL 404 Modern American Poetry Spring

A survey of twentieth century American poetry centering on the major figures. In a given year approximately six of the following poets will be studied carefully with others being touched upon: Robinson, Frost, Stevens, Williams, Pound, Eliot, Ransom, Cummings, Roethke, Lowell. Mr. Stitt

AL 405 American Criticism Spring

A survey of American literary criticism from the beginnings to the present. The first part of the course will focus on the historical evolution of criticism from the American Renaissance (Bryant, Lowell, Poe, Emerson, Whitman) through the late 19th century (Garland, James) and the modernists (Pound, Eliot, Richards). The rest of the course will focus on selected theoretical and practical approaches to literature: literature as form, as performance and as cultural document. Mr. Conron

AL 406 Black American Literature Fall

An introductory study of Black American poetry and prose narrative from the 19th century to contemporary times. Readings will include selections of slave narratives, folk tales, folk sermons, speeches, short stories, poems, and novels. (Permission. Limited to 25 students.) Mr. Conron

AL 407 American Autobiography Fall

A study of the development of American character as manifested in the self-histories of the Puritans, the *Autobiography of Benjamin Franklin,* Grant's *Personal Memoirs, The Education of Henry Adams,* Conrad Aiken's *Ushant,* the *Autobiography of Malcolm X,* and others. (HI 203, AL 202, or permission.)

Mr. Munford

AL 409 Seminar: William Faulkner Spring

Detailed analysis of the major novels and stories of Faulkner's early and middle years; pastoral order, a sense of the waste land, the role of the community, and the development of style in *The Unvanquished, Sartoris, Sanctuary, Requiem for a Nun; The Sound and the Fury, As I Lay Dying, Absalom, Absalom!, The Wild Palms, The Hamlet,* and *Go Down Moses.* (Permission. Limited to 15 students.)

Mr. Martin

[**AL 410 Seminar: Studies in Contemporary American Poetry**] Offered in Spring 1977.

AL 412 Folklore and Mythology Fall

An analysis of the backgrounds of American folklore with emphasis on the material as it serves both to form our cultural heritage and to shape American literature. (AL 101 or 201 or permission.) Mr. Beck

AL 500 Special Research Fall, Spring
Open to individual qualified majors. (Permission.) Staff

AL 700 Senior Research Fall, Winter, Spring
For Senior majors who are candidates for Departmental Honors. Staff

AL 704 Senior Seminar Fall
A study of general topics based upon selected readings and on the student's general knowledge of the field of American Literature. Each student will present a report and write a paper on a topic chosen in consultation with one of the participating faculty. (Senior majors.) Mr. Munford and Staff

AL 705 Senior Seminar and General Examination Spring
Group discussion based on readings of historical and critical studies. The discussions and readings are designed to prepare the student for the General Examination, in which he or she will be expected to make informed statements about literary relationships and the interplay of literature and general culture. (Senior Majors.) Mr. Stitt and Staff

See also Division of Humanities.

Program in American Studies

The Program in American Studies—using the resources of several different Departments—offers an interdisciplinary approach to the study of American culture. Students are expected to achieve both a breadth of knowledge (through the requirements in Part I below) and a depth of focus (through Parts II and III).

The program is administered by the Guidance Committee on American Studies; the members, who also serve as student advisers, are: Mr. Conron, Committee Coordinator, 1975-1976 (American Literature), Mr. Catton (History), Mr. Craven (Economics), Mr. Ferm (Religion), Mr. Haerle (Sociology-Anthropology), Mrs. Ilgen (History), Mr. Jacobs (History), Mr. Nelson (Political Science), Mr. Stitt (American Literature).

Eighteen courses in the following three categories are required for the major:

I. Courses required of all students (10)

AL 101 or 201 American Literature I
AL 202 American Literature II

PLUS

One other course in American Literature

HI 203 United States History, 1607-1865
HI 204 United States History, 1865-1970

PLUS

One other course in American History

PS 102 American Political Regime
RE 220 The Shaping of American Religious Life
SA 102 Sociological Perspectives

PLUS *one* of the following:

SA 321 Native Peoples of North America
SA 343 American Community Studies
SA 366 Majority-Minority Relations

II. Four related American courses chosen from the following list. Students are required to take at least three of these courses in a single department. These courses, in conjunction with those taken under Part I, will give the student a concentrated experience in a single, traditional discipline.

American Literature

AL 301-302	**The American Novel**	Fall, Spring
AL 401	**The American Short Story**	Spring
AL 402	**Emerson, Melville, Whitman**	Fall
AL 404	**Modern American Poetry**	Spring
AL 405	**American Criticism**	Spring
AL 406	**Black American Literature**	Fall
AL 407	**American Biography**	Fall
AL 412	**Folklore and Mythology**	Fall
AL 410	**Seminar: Studies in Contemporary American Poetry**	Spring

Art

AR 207	**American Art, 1760-1913**	Fall

Economics

EC 150	**Contemporary Economic Problems (Macro)**	Fall or Spring
EC 155	**Contemporary Economic Problems (Micro)**	Fall or Spring
***EC 270**	**Public Finance**	Spring
***EC 320**	**The Corporation**	Spring
***EC 360**	**Urban Economics**	Spring
***EC 365**	**Environmental Economics**	Fall
***EC 370**	**Monetary Theory and Institutions**	Fall
***EC 460**	**Industrial Organization and Public Policy**	Spring
***EC 480**	**Radical Economics**	Spring
***EC 485**	**Labor Economics**	Fall

*Check prerequisites

Geography

GG 311	**Seminar: Spatial Analysis of Anglo-America**	Fall

History

HI 301	**Economic History of the United States**	[1975-76]
HI 303	**The United States in the 19th Century, 1801-1861**	Fall
HI 304	**The United States in the 19th Century, 1861-1901**	Spring
HI 305	**Twentieth-Century America, 1900-1940**	Fall
HI 306	**Twentieth-Century America, 1938-1970**	Spring
HI 307	**Black History**	Spring
HI 309	**History of American Education**	[ ]
HI 421-430	**Readings courses in American History, as offered.**	

Political Science

PS 104	**Introduction to American Political Processes**	Spring
PS 203	**American Politics and Legislation**	Fall
PS 305	**American Constitutional Law: Principles and Structure**	Fall
PS 306	**American Constitutional Law: Individual Rights**	[1975-76]
PS 307	**The American Presidency**	Fall
PS 309	**Urban Politics**	Fall
PS 311	**American Foreign Policy**	Fall
***PS 402**	**Seminar in American Constitutional Law**	Spring
***PS 406**	**Seminar in American Electoral Behavior**	Spring

*Check prerequisites

Sociology-Anthropology

SA 321	**Native Peoples of North America**	Fall
SA 337	**Political Sociology**	Fall
SA 343	**American Community Studies**	Fall
SA 345	**Work, Leisure and Sport**	Spring
SA 366	**Majority-Minority Relations**	Fall
SA 388	**Deviance**	Spring
SA 392	**The Family**	Spring

III. Advanced Studies: FOUR courses required.

AS 400 Seminar in American Studies (Junior Year) Fall

An introduction to the theories and methods of American Studies and their application to a particular theme or aspect of American culture.

Mr. Conron and Staff

AS 401 American Studies Research Seminar (Junior Year) Spring

An introduction to the definition and exploration of research topics in American Studies. Major requirement of this course: a research paper using both primary and secondary sources. Mrs. Ilgen and Staff

AS 700 Senior Thesis Fall and Spring

For students who have completed AS 400 and AS 401 and who have thus qualified for the Senior Program. Under the guidance of one or more appropriate faculty members, each senior will do research leading toward a written thesis of substantial length (80-100 pp.) on some related interdisciplinary aspects of American culture. The thesis is to be submitted no later than April 1. The Spring Semester will then culminate in an experimental seminar. Staff

Note: These requirements are in effect beginning with the Class of 1977. Members of the Class of 1976 should register for AS 700 in the Fall and Winter Terms and AS 704 in the Spring Term:

AS 704 Seminar in American Studies (Senior Year) Spring

Each senior will conduct a seminar discussion on the subject he has addressed in his thesis and as applied to readings he has assigned to the group. (Not to be offered after 1976.) Staff

Art

Required for the major: In the belief that experience in both the practice and history of art constitute the most rewarding program, the Department requires both AR 101, Introduction to Art and Art History (*or* AR 102, Twentieth Century Painting and Sculpture), and AR 209, 210, Introduction to Design, of its beginning students. Completion of these courses with a grade of C or better qualifies a student for the major.

Students may complete their requirement in either of two ways:

Alternative A: six additional courses in the history of art plus senior work.

Alternative B: four additional studio courses, and four additional courses in the history of art (two of which shall have as their subject art before 1800), plus senior work.

Senior work:

Alternative A: Students elect two terms of AR 700, normally Fall and Winter, and write a senior thesis.

or

Students elect two terms of AR 700 in areas in which they have already done course work, and write two senior essays.

Alternative B: Students elect at least two studio courses beyond the six required for the major.

or

With Department permission, students elect AR 700 in each of the three terms, and carry out a sustained studio project, in one medium.

Honors: are awarded to students who do outstanding work in studio or art history. Normally a senior thesis or a portfolio produced during senior year must be presented by candidates for honors.

AR 101 An Introduction to Art and Art History Fall

An introduction to the study of Western painting, sculpture, and architecture. Art works will be considered as objects of aesthetic significance, and in the broader context of both personal creation and cultural ambience. Two lectures and one discussion period. (Freshmen and sophomores only.)

Mr. Hunisak and Staff

AR 102 Twentieth Century Painting and Sculpture Spring

With a format identical to AR 101 (two lectures and one discussion section per week), this course is offered on an introductory level and assumes no prior experience in art history. As we proceed to isolate the unique aspects of painting and sculpture produced betwen 1870 and 1970, we will focus on selected problems —aesthetic, perceptual, critical—which form a basis for art historical method. (Open to freshmen and sophomores, and to upperclassmen by permission.)

Mr. Reiff and Staff

AR 201 Art of the Italian Renaissance Fall

A survey of Italian art from 1250 to 1600, with emphasis on such leading figures as Masaccio, Piero della Francesca, Leonardo, Raphael, and Michelangelo, their interrelationships, and the sources of their artistic inspiration in Roman art and contemporary philosophy. Mr. Colbert

AR 203 The Art of India Fall

A survey of Indian art and architecture from the ancient Indus Valley Civilization to Rajput miniature painting and the Taj Mahal, with excursions into Ceylon, Burma, to Angkor Wat in Cambodia and Borabadur in Java. No previous knowledge of Indian culture or history is required or expected. Mr. Reiff

AR 204 The Art of China Spring

An historical and stylistic survey of the painting, sculpture, ceramics, jades, architecture, and bronzes. The history, religion, artistic theories, and techniques are studied to provide students with a sufficient background. While no previous knowledge of Oriental culture is required, AR 203 is recommended. Offered in alternate years. Mr. Reiff

AR 205 Figure Drawing Fall

A studio course in the discipline of figure drawing. Working from the model, the student will make intensive study drawings concerning problems of proportion, distortion, scale, and motion. Limited to 30 students. Mr. Bumbeck

AR 206 Figure Drawing Spring

A continuation of AR 205. Mr. Bumbeck

AR 207 American Art Spring

An examination of American art and architecture in the context of its European heritage, particularly that of England. From colonial times to the Armory Show, selected problems will be considered to determine the extent of America's aesthetic dependence on Europe, as well as the degree to which an independent tradition has been established. Two lectures per week. Mr. Hunisak

[**AR 208 The Art of Japan**] Offered in Fall 1976.

AR 209 Introduction to Design Fall

Study of two-dimensional organization of forms and space. Critical analysis of pictorial structure to provide a conceptual foundation for self- evaluation and for further work. Students are required to take AR 210 to receive credit for AR 209. This course is required for all Art majors. Limited to 30 students. Mr. Markhoff and Mr. Steinbach

AR 210 Introduction to Design Spring

A continuation of AR 209. Limited to 30 students. Mr. Markhoff and Mr. Steinbach

AR 211 The Art of Africa Fall

A survey of major African artistic traditions notably of the Western and Central tribal cultures. Study centers on matters of style, content, operational context, and technique. Mr. McNaughton

AR 301 Modern Architecture Spring

The Western tradition in architecture since the Industrial Revolution. A survey of the men, monuments, and developments that established the aesthetic, social, and technological background for the contemporary architectural scene. Mr. Andres

AR 302 Baroque Art: Painting, Sculpture, and Architecture of Seventeenth Century Rome Fall

This course will concern itself with a period when Rome was the undisputed capital of the art world. From the vast projects of Sixtus V to the death of Bernini, we will investigate the richness, diversity, and splendor of artistic creation under a Church Triumphant. Mr. Hunisak

[**AR 303 The Art of Northern Europe, 1300 to 1600**] Offered in Spring 1977.

AR 304 The Art of Northern Europe: The Baroque Spring

The development of Baroque styles and subject matter in France, Germany, and the Low Countries from 1600 to 1750. Particular attention is paid to Rubens, Rembrandt, Vermeer, and Poussin, and to their relationship to the earlier Northern artists as well as Italian art. This course constitutes a continuation of AR 303, which is recommended but is not a prerequisite. Mr. Colbert

AR 305 Painting and Sculpture of 19th Century Europe Fall

Painting and sculpture just before the French Revolution, Neo-classicism, the Romantic movement, Realism, and Impressionism primarily in France, with excursions into England, Germany, Italy, and Scandinavia. Mr. Reiff

[**AR 307 The Art of the City**] Offered in Fall 1976.

AR 309 Painting Fall

Painting, emphasizing the structuring of pictorial space from representational and non-representational viewpoints. Use of new and traditional media. (AR 103, 104, or permission.) Mr. Steinbach

AR 310 Painting Spring

A continuation of AR 309. Mr. Steinbach

AR 311 Ancient Art Spring

The content of this course alternates between the early phases of ancient art, that of Egypt, Mesopotamia, and Greece and the later, that of Hellenistic Greece and Rome. The focus this Spring is on the latter and is essentially an artistic history of Rome, its civilization as mirrored in eight centuries of its art and architecture. On the surface, Roman art appears eclectic and derivative, but on closer look, its technical, organizational, propagandistic brilliance is made manifest. Mr. Andres

AR 315 Printmaking Fall

Studio instruction in traditional and contemporary methods of intaglio and relief printmaking. Critical emphasis on the union of the printmaking craft with problems of drawing, painting and design. Limited to 20 students. (AR 103, 104 or permission.) Mr. Bumbeck

AR 316 Printmaking Spring

A continuation of AR 315. Mr. Bumbeck

AR 319 Sculpture Fall

An introduction to sculpture. A variety of experiences in various media and diverse problems of design will be stressed. (AR 103, 104 or permission.) Mr. Markhoff

AR 320 Sculpture Spring

A continuation of AR 319. Mr. Markhoff

[**AR 401 Seminar in Modern Art**] Offered in 1976-77.

[**AR 403 Seminar in Modern Architecture**] Offered in 1976-77.

[**AR 404 Seminar in Art Criticism**] Offered in 1976-77.

AR 405 Seminar in Baroque Art Spring

Gianlorenzo Bernini—titanic genius, re-definer of the art of sculpture, creative collaborator with eight papal regimes, and image-maker *par excellence* for *Ecclesia triumphans*—will be the subject of our investigation. Limited to 12 students. (AR 302/permission.) Mr. Hunisak.

AR 408 Seminar on Special Problems in African Art Fall

Such topics as the expression of power in art, style distribution and its transitions, royal and religious modes, aesthetic distinctions between high art and craft will be considered. Limited to 12 students. (Permission.)

Mr. McNaughton

AR 500 Advanced Studies in the Visual Arts

Supervised independent work in art history or studio. Staff

AR 700 Senior Independent Study

See also Division of Humanities Staff

Biology

The Department of Biology offers programs in a broad spectrum of areas, ranging from life processes at the molecular level to the interrelationships of whole organisms and their environments. The Major Program is designed to enable the liberal arts student to understand the biological world and man's role in it, as well as to prepare students for graduate and professional schools. The Department is well equipped to offer laboratory study and student research opportunities in many areas. In addition, the geographical location of Middlebury College, with thousands of acres nearby owned by the College or within the Green Mountain National Forest, provides an excellent outdoor laboratory for ecological studies.

Each student electing a Biology major plans a program of courses in close consultation with a faculty adviser within the Department. This program will include BI 110, other Biology courses to bring the total within the Deparment to at least 10, and at least 3 cognate courses chosen from the departments of Chemistry, Physics and Mathematics. A maximum of 2 courses from CH 241, CH 242, CH 421, and CH 422 can be included among the 10 courses required for the major if they are not also used as cognates. Other courses outside the offerings of the Biology Department may be accepted for students who petition the Department individually. This procedure is intended to allow the student maximum flexibility in designing a major program which fits individual interests while providing the guidance needed to avoid mistakes which might hamper a future career.

A separate, joint major with Chemistry has been developed to enable students to study aspects of both fields without having to take all the courses prescribed for a pure major in either field. The Department also participates in the interdisciplinary Environmental Studies major. Special major programs involving biology and other fields can be arranged to suit individual needs.

Students planning careers which require graduate or professional school training involving biology should be familiar with the subject matter included in CH 101, CH 241, and CH 242; MA 112; and PH 109, and PH 110, in addition to their biology program. Some medical and graduate schools expect additional courses in mathematics and chemistry. Students who anticipate applying to graduate or professional school programs will be urged by their advisers to include appropriate courses in their programs.

The Department admits a limited number of graduate students as candidates for the Degree of Master of Science in Biology. The requirements of this program include research, a thesis, an oral examination, and some assisting in undergraduate laboratories.

Courses designated with an asterisk* may be taken without laboratory under the following conditions: (1) The stated prerequisites for the course must be met. (2) Students majoring in Biology or jointly in Biology and other subjects may not count such courses toward the fulfillment of the major.

Required for a Major: BI 110; 9 elective courses within the Biology Department or accepted for the Major by the Department; 3 cognates chosen from Chemistry, Mathematics, and Physics. Courses with optional laboratories in Chemistry and Physics must be taken with laboratory to fulfill this cognate requirement. Recommended: see list above, advised as preparation for graduate and professional schools.

Required for a Joint Major in Biology and Psychology: see description under Psychology.

Required for a Joint Major in Biology and Chemistry: see description under Chemistry.

Required for an Environmental Studies—Biology Major: 5 upperclass Biology courses including BI 311 and BI 312, 6 cognates from Chemistry, Geology, Mathematics or Physics, 5 cognates from pertinent non-science disciplines including Geography, a knowledge of a modern foreign language and two senior-thesis courses in Biology.

Honors Program: students should apply during Spring Term of Junior year. Honors are awarded on the basis of an Advanced Study (BI 500) project of superior quality and satisfactory completion of requirements to be specified by the Department.

Proficiency Examination: students are urged to take the Biology proficiency examination before starting BI 110. Those who pass the examination are excused from the BI 110 requirement for the Major (and joint majors including Biology), and have satisfied all BI 110 prerequisites for more advanced courses. They must still take 10 courses within the Department (or acceptable to it), and the required cognates, to major in Biology.

BI 103 Biology and its Implications for Humans Fall

A course designed for students not intending to major in Biology emphasizing to some degree the bearing of the findings of Biology on our own species. Topics to be discussed will include the relations of organisms to their environments; levels of organization from molecules to populations; cell and species continuity (genetics and evolution); human genetics; and animal and human behavior. Laboratories will both supplement and complement lecture material, and will include seminar discussions on such topics as human behavior. 3 hrs. lect., 3 hrs. lab. Mr. McDonald

BI 110 Concepts of Modern Biology Fall

An examination of some of the more important concepts underlying modern ecology, evolutionary biology, Mendelian and molecular genetics, cell metabolism, and physiology, with emphasis on developing meaningful generalizations. Laboratory work stresses experimentation and interpretation of biological data, and both supplements and enlarges on topics considered in lecture. Though this course is not merely an introductory survey, it does serve as an introduction to the biology major for students wishing to explore biology further prior to beginning more specialized courses. Students who have had an advanced high-school biology program should take the biology AP examination or should plan to take the Biology Proficiency Examination given by the Department during orientation week to see if this course would be helpful for their major. 3 hrs. lect., 3 hrs. lab. Mr. Bell

***BI 201 Invertebrate Biology** Spring

A necessarily cursory introduction to the wide variety of organisms that account for approximately 96% of known animal species. Lectures will stress the different ways in which major groups have adapted to their environments, and will consist of correlative analyses of structures and functions. Laboratory exercises will supplement the lectures, with emphasis on a phylogenetic survey of aquatic, especially marine, forms. (BI 110 or BI 103.) 3 hrs. lect., 4 hrs. lab. Mr. Watters

***BI 203 Plant Form and Function** Fall

An introduction to the major plant groups. The morphology and physiology of selected fungi, algae, mosses and vascular plants wil be explored in lecture and laboratory. The course will stress morphological and physiological adaptation of plants to the environment. An introduction to the taxonomy of local vascular plants is also included. The laboratory will commence with several field trips to local spots of botanical significance, including bogs, woodlands and a

lumbering operation. Students will collect specimens of fungi, algae and other plants for later detailed laboratory observation. (BI 110 or BI 103.) 3 hrs. lect., 4 hrs. lab. Staff

[*BI 205 **The Developmental Biology of Plants and Animals**] Offered in 1976-77.

BI 210 Comparative Vertebrate Anatomy Fall

This course is designed to acquaint the student with the gross anatomy of selected organ systems in a variety of vertebrates and other chordates. The following systems are considered: skeletal, muscular, digestive, respiratory, circulatory, excretory, reproductive and endocrine. A section on the origin of vertebrates and their subsequent evolution is included. (BI 110 or BI 103 or permission.) 3 hrs. lect., 3 hrs. lab. Mr. Fischer

BI 211 Comparative Vertebrate Physiology Spring

This is an introductory physiology course using the concept of homeostasis as the central unifying theme. Areas of major emphasis will include gross metabolism, gross and cellular transport, the endocrine system, water and electrolyte balance, digestion and absorption of nutrients, and muscle contraction. Although occasionally operating at the celluar level, this course is concerned primarily with function at the level of organ systems. (BI 110 or permission.) 3 hrs. lect., 4 hrs. lab. Mr. Fischer

[*BI 267 **The Biology of Insects and Related Arthropods**] Offered in 1976-77.

[BI 305 **Microbial Biology**] Offered in 1976-77.

BI 310 General Ecology Spring

Basic ecological principles and concepts pertaining to and governing the interrelationships between organisms, and between organisms and the physical environment. Effect of abiotic environmental parameters and biotic phenomena such as territoriality, aggression, communication, predation and parasitism on energy flow, nutrient cycling and populations. Problems of environmental modification by the human species. Inherent ability of natural populations to expand and to control their own and other population sizes. (BI 103 or 110 or permission. This course will be prerequisite for Fall 1976 BI 311). 3 hrs. lect., 3 hrs. lab.
Mr. Woodin

BI 311 Ecosystem Analysis Fall

Theory and practical field methods of analyzing the components of nutrient cycling and energy flow in ecosystems. Interrelationships between biotic and abiotic processes that control the complete ecosystem. Emphasis placed on energy flow and the hydrologic subsystem as a carrier of cycling materials. Semester-length library research paper required. Laboratory consists of intensive weekend field studies of entire, unspoiled, drainage basin as a sample ecosystem followed by indoor analysis of collected data. (BI 103 or 110 or permission. BI 310 will be prerequisite for this course beginning with Fall 1976.) 3 hrs. lect., 3 hrs. lab.
Mr. Woodin

***BI 314 Genetics** Spring

Lecture topics include the physical basis of heredity, chromosome aberrations, the nature and action of hereditary material, mutations, linkage and recombination in procaryotes and eucaryotes, and an introduction to evolutionary and population genetics. Laboratory study is designed to introduce some major organisms and techniques used in research, and includes training in analyzing and reporting data. 3 hrs. lect., 3 hrs. lab. (BI 110 or 103.) Mr. Saul

BI 315 Marine Microbiology Spring

This course will apply concepts and techniques of ecology and microbiology toward elucidation of the role of microorganisms in marine food chains. After a survey of marine phytoplankton and factors which effect the distribution of primary production, lectures will proceed into a thorough study of heterotrophic activity in the sea in relation to available dissolved and particulate organic carbon. Particular emphasis will be placed on methods of study and interpretation of data gleaned from research with radioactive tracers, continuous cultures, and isolated strains of bacteria and algae— these and other techniques will be the focus of laboratory exercises. There will be considerable reading in the original scientific literature, ranging from topics as light as diatom flotation to subjects as deep as abyssal food chains. (BI 110 or BI 103; BI 305 or BI 310.) 3 hrs. lect., 3 hrs. lab. Mr. Bell

***BI 316 Animal Behavior** Spring

A review of recent developments in the field of the behaviors of invertebates and vertebrates, particularly of the latter, with emphasis on the evolution and ontogeny of behavioral patterns, and some consideration of the physiological and neural mechanisms underlying them. The laboratory will consist of two independent investigations and reports thereon, one on aquarium fish and the other on local mammals or birds in their natural habitats. 3 hrs. lect., 3 hrs. lab. (BI 103 or 110 or permission.) Mr. McDonald

BI 350 Topics in Cellular Biology Fall

Emphasis on the integrative organization of cellular structure and function, especially with respect to the acquisition, transformation, and utilization of energy. A critical and experimental approach to the study of cellular phenomena will be stressed and in part will involve physical and chemical concepts and methods. Laboratory experiments are designed to implement this approach. (BI 110, CH 241 or permission.) 3 hrs. lect., 4 hrs. lab. Mr. Watters

BI 401 Advanced Genetics Fall

An examination of selected topics of current interest in various aspects of genetics, based on readings from recent journals and symposia. Discussion in classes will be strongly encouraged. Two library research papers will be required. (BI 314 or permission.) Mr. Saul and Mr. McDonald

BI 408 Advanced Topics in Cellular and Developmental Biology Spring

Cell membranes: structures and function. A critical examination of current literature, with emphasis on methodology and data interpretation. We shall investigate the constraints that transport data and models of membrane function place on models of membrane structure and, conversely, how ultrastructural images of membranes affect the ways in which we interpret membrane function. Lectures and discussion. Each student will write at least one critical review, based on readings from primary sources. (BI 350 or CH 421 or permission.) Mr. Watters

BI 410 Evolutionary Biology Fall

A consideration of the numbers and diversity of species, and the regulatory roles of competition and predation. The strategy and predictability of evolution. Genetic mechanisms underlying adaptation, speciation, and evolution. Lectures and discussion; possibly occasional laboratories and field trips. Each student will be required to write at least one paper based on journal literature. (BI 314, MA 112.) Mr. Saul and Mr. Bell

BI 500 Advanced Study Fall, Winter, Spring

A project involving laboratory research or extensive library study on a topic chosen by the student and a faculty adviser. For Biology majors. (Permission.)
Staff

BI 750 Senior Work (Environmental Studies) Fall, Winter, Spring

Independent Study—Senior Thesis
Independent Study, normally involving a laboratory or field research project for any two of the three senior terms. Required of Environmental Studies majors specializing in ecology. Not open to Biology Majors. Staff

BI 900 Research and Thesis Fall, Winter, Spring

Required for all candidates for the Master's degree. Staff

Chemistry

The Department of Chemistry believes that the basic program required of all majors provides a firm foundation in fundamental principles on which individual students may build to accommodate a variety of objectives including secondary-school teaching, a position in industry or advanced work in graduate or professional school. Although non-majors may take, with the exception of CH 412, any laboratory course without the laboratory, courses constituting a part of a major in chemistry must be taken with laboratory. The Department of Chemistry is accredited by the American Chemical Society and students taking the appropriate electives may be certified by the Society.

Required for a Major: CH 101*, CH 131, CH 211, CH 241, CH 242, CH 351 plus four elective courses in the Department; MA 112, MA 113, PH 109 and PH 110. Two or three units of independent study may be included in the four required chemistry electives. Students with a professional interest in chemistry are encouraged to elect CH 341, CH 352, CH 412, CH 431, CH 452, two course credits of independent study, MA 201, MA 202 and GN 101, GN 102 or RU 101, RU 102.

Joint Major in Biology and Chemistry: Required for a major: Biology: BI 110, and four electives in Biology; Chemistry: CH 101*, CH 131, CH 211, CH 241, CH 242, CH 351; MA 112, MA 113, PH 109, PH 110 and three additional electives from Biology, Chemistry, Mathematics or Physics.

A deposit fee to cover cost of broken apparatus is charged in each laboratory course. Bills will be mailed after the second week in each term.

* CH 101 is the normal introductory course in Chemistry. However, many students qualify for permission to omit CH 101 and begin studies in Chemistry with CH 211 or CH 131, or CH 241. Consult the Chairman of the Department.

CH 101 Fundamentals of Chemistry Fall, Spring

Fundamental principles of chemistry. Atomic theory and atomic structure, chemical bonds, stoichiometry, kinetic theory and the states of matter. Problem drill, conferences. Laboratory work deals with the testing of theories by various quantitative methods. Students with adequate secondary-school preparation are encouraged to consult the Department for permission to elect Chemistry CH 211, CH 131, or CH 241 in place of this course. 3 hrs. lect., 4 hrs. lab. Breakage fee.

Mr. Gleason, Mr. Roberts

CH 107 Same as CH 101 but without the laboratory.

CH 102 Environmental Chemistry Fall

Principles of general chemistry necessary for an understanding of the chemistry of natural systems. Emphasis on the chemistry of natural systems. Emphasis on the chemistry of sulfur, nitrogen and carbon cycles and of the heavy metals relative to air, water and soil pollution. Laboratory experience in environment sampling and analysis. 3 hrs. lect., 3 hrs. lab. Breakage fee. Mr. Pool

CH 108 Same as CH 102 but without the laboratory.

CH 131 Systematic Inorganic Chemistry Fall, Spring

A systematic study of the elements and their compounds based on the Periodic Table. The isolation of the elements from their natural sources, and the synthesis of some important types of inorganic compounds. The properties of selected elements and their compounds are discussed in class and/or studied in the laboratory using various analytical methods. (CH 101 or permission.) 3 hrs. lect., 3 hrs. lab. Breakage fee. Mr. Pool

CH 137 Same as CH 131 but without the laboratory.

CH 211 Analytical Chemistry I Spring

Extensive treatment of mass action theory (ionic equilibrium) concerned mainly with ionization of strong and weak electrolytes, buffers, hydrolysis, solubility of difficultly soluble substances, complex formation, oxidation-reducation systems, and quantitative measurements involving these phenomena. Laboratory work is mainly titrimetric analysis with some gravimetric methods. (CH 101 or permission.) 3 hrs. lect., 6 hrs. lab. Breakage fee. Mr. Pool

CH 217 Same as CH 211 but without the laboratory.

CH 241, CH 242 Organic Chemistry I and II Fall, Spring

An introduction to the study of the compounds, both aliphatic and aromatic, of carbon. The approach is based on the properties of functional groups with emphasis on electronic theory and reaction mechanisms. Laboratory exercises involving synthesis of organic compounds, analysis of various classes of compounds, and identification of unknowns complement the lecture material. (CH 101 or permission; CH 241 must precede CH 242.) 3 hrs. lect., 6 hrs. lab. Breakage fee.
Staff

CH 247, CH 248 Same as CH 241, CH 242 but without the laboratory.

CH 341 Organic Chemistry III Fall

Fundamental organic chemistry beyond monofunctional compounds. Heterocyclic and polyfunctional species are emphasized, including treatment of monosaccharides, disaccharides and amino acids. The main focus of the laboratory will be identification of organic compounds with heavy reliance on modern instrumentation, particularly infrared and nuclear magnetic resonance spectroscopy. Experience will be gained in handling mixtures as well as single compounds, but identification requirements will be tailored not to exceed the specified six hours of laboratory work. (CH 242.) 3 hrs. lect., 6 hrs. lab. Breakage fee.
Staff

CH 347 Same as CH 341 but without laboratory.

CH 351 Physical Chemistry I Fall

A study of the properties of gases, liquids, and solutions. The laws of thermodynamics are developed and applied to simple chemical systems and to chemical equilibrium. Chemical kinetics is treated empirically with consideration given to the order and molecularity of reactions and the effect of temperature. (MA 113, PH 109, plus 2 semester courses in chemistry.) 3 hrs. lect., 4 hrs. lab. Breakage fee. Mr. Roberts

CH 357 Same as CH 351 but without the laboratory.

CH 352 Physical Chemistry II Spring

A continuation of CH 351. Further applications of thermodynamics to chemistry by use of chemical potential. The phase rule. Electrochemistry. Elements of statistical thermodynamics are applied to ideal gases. Theories of chemical kinetics. (CH 211, 351.) 3 hrs. lect., 4 hrs. lab. Breakage fee. Mr. Roberts

CH 358 Same as CH 352 but without laboratory.

[**CH 412 Advanced Analytical Chemistry**] Offered in 1976-77.

CH 421 Biochemistry Fall

An in-depth study of the structure and function of macro-molecules. The physical and chemical properties of proteins, enzymes, and nucleic acids are studied. Topics include: techniques of isolating and determining the physical properties of proteins, the biological function of enzymes and enzyme kinetics, and a physical description of the function and behavior of nucleic acids. (CH 242, CH 351, or permission; Biology BI 110 is recommended.) 3 hrs. lect. Mr. Bennett

CH 422 Biochemistry Spring

A study of intermediary metabolism and bioenergetics of biological systems; a brief look at genetic storage and transmittance of information. Some of topics studied are: ATP and tricarboxylic acid cycles and biosynthesis of carbohydrates, amino acids, and proteins. (CH 242 (248), CH 351, or permission; BI 110 is recommended.) 3 hrs. lect. Mr. Bennett

CH 431 Advanced Inorganic Chemistry Fall

Atomic structure; molecular structure by valence bond and molecular orbital treatment; transition metal complexes according to valence bond, molecular orbital, crystal field, and ligand field theories. Relations of atomic and molecular structure to chemical and physical properties. Other topics such as crystal chemistry, acid-base theories, solvent systems, and nuclear chemistry. (CH 131 and four additional courses in Chemistry.) 3 hrs. lect. Mr. Bennett

[**CH 442 Advanced Organic Chemistry**] Offered in 1976-77.

CH 443 Advanced Organic Chemistry Spring

A study of some of the more important special topics of organic chemistry including advanced synthesis in general with specific treatment of the following: reactions of active methylene compounds; structure determination of complex natural products; peptide synthesis and sequential analysis; introduction to the steroids; selected name reactions and rearrangements. (CH 242.) 3 hrs. lect. Staff

[**CH 452 Physical Chemistry III**] Offered in 1976-77.

CH 500 Independent Study Project Fall, Spring

Individual Study for qualified students. Permission. Breakage fee. Staff

CH 700 Senior Work Fall, Winter, Spring

Senior majors may register for two or three course equivalents. The student plans and carries out a laboratory research project generally related to current faculty research interests. This work is normally culminated by the writing of a senior thesis. Staff

Classics

Courses in the Classics are offered to help students attain a rapid and accurate knowledge of Greek and Latin and make them appreciative of the aesthetic and historical values of major and minor authors who wrote in the two languages. Students who are interested in advanced work in the Classics are encouraged to contemplate a joint or double major with some other department.

CL 101 Elementary Latin Fall

An introduction to the Latin language and literature. Text: *Lingua Latina Secundum Naturae Rationem Explicata.* Miss Heibges

CL 102 Elementary Latin Spring

A continuation of CL 101. (CL 101 or one year of high-school Latin.) Miss Heibges

[**CL 103 Elementary Greek**] Offered in 1976-77.

[**CL 104 Elementary Greek**] Offered in 1976-77.

CL 201 Intermediate Latin Fall

Text: *Lingua Latina Secundum Naturae Rationem Explicata, Vols. 3 and 4.* (CL 102 or two years of high-school Latin.) Miss Heibges

CL 202 Intermediate Latin Spring

Continuation of CL 201. (CL 201 or three years of high-school Latin.) Miss Heibges

[**CL 203 Intermediate Greek**] Offered in 1976-77.

[**CL 204 Intermediate Greek**] Offered in 1976-77.

CL 301 Advanced Latin Fall

Roman Historiography: Cicero: *De Re Publica.* (CL 202 or four years of high-school Latin.) Miss Heibges

CL 302 Advanced Latin Spring

Roman Philosophy: Vergil: *Aeneid* Bk. VI. (CL 202, 301, or four years of high-school Latin.) Miss Heibges

CL 550 Independent Study Fall, Spring

Students select an author not previously studied and work largely on their own, conferring weekly with the staff about problems in language and interpretation as they arise. Miss Heibges, Mr. Harris

See also Division of Foreign Languages.

Economics

Beginning with the Class of 1978 the *Major Program* consists of two introductory courses, EC 150 and 155; two intermediate theory courses, EC 350 and 355; EC 215, Mathematical Economics; EC 210, Economic Statistics; and four electives, one of which must be from the "400" group. Course numbers are intended to reflect level of difficulty. Seniors interested in working for Honors may do so through the 700 course taken in the Fall and Winter terms.

The Department strongly recommends that majors take MA 112 (Mathematical Analysis I) early in their programs, since it (or equivalent course) is a prerequisite for the EC 215, Mathematical Economics, a major requirement.

Any student may bypass either EC 150 or 155, the two introductory courses, by taking a qualifying examination. These will be given during the first week of the Fall and Spring terms at a time and place to be announced by the Department.

Majors considering graduate programs in Economics are urged to take EC 410. Those considering graduate programs in Business should take EC 220 and 320. Candidates for Law school should also take EC 220. Non-majors considering graduate programs in Economics or Business are urged to take EC 350 and 355 as well as those courses recommended immediately above for majors.

EC 150 Contemporary Economic Problems (Macro) Fall, Spring

An introduction to the analysis of such macroeconomic problems as inflation; employment levels; the role of money, taxation and spending; and resource use and conservation. Staff

EC 155 Contemporary Economic Problems (Micro) Fall, Spring

An introduction to the analysis of such microeconomic problems as price formation (the forces behind demand and supply); market structures, from competitive to oligopolistic; the distribution of income, and public policy options bearing on these problems. Staff

EC 210 Economic Statistics Spring

Basic methods of statistical analysis with an emphasis on economic applications. Topics include probability, sampling, random variables and distribution theory, hypothesis testing, and an introduction to linear regression. (EC 210 or MA 112 or permission.) Mr. Korbel

EC 215 Mathematical Economics Fall

Develops the mathematical tools necessary for economic analysis. Matrix algebra, differential calculus, and integral calculus are presented within the framework of static, comparative static, and dynamic analysis. (EC 150, 155 and MA 112 or permission.) Mr. Korbel

EC 220 Accounting Fall, Spring

Accounting procedures for proprietorships and corporations with maximum emphasis on theoretical considerations involved. Mr. Smith

EC 230 The Industrial Revolution and its Antecedents Fall

An analytical examination of the decisive turning point in the economic development of the western world, probing *inter alia* the roles of science, capital, population growth, and enterprise. Mr. Wolff

EC 320 The Corporation Spring

A study of the corporation as an economic and social institution. (EC 150, EC 155 and EC 220.) Mr. Smith

[**EC 330 The Economics of Development**] Offered in 1976-77.

EC 335 Comparative Economic Systems Spring

An analysis of the alternative methods proposed and used for solving the universal economic problems under different social and political philosophies and forms of government. (EC 150 and EC 155.) Mr. Wolff

EC 350 Macroeconomic Theory Spring

Macroeconomic theory provides a framework in which the major forces affecting the overall performance of the economy can be isolated and their influence on aggregate activity analyzed. Its goal is to provide a basis for prediction and control of such economic aggregate as level of employment and unemployment, general price level, and level and rate of growth of national income and product. (EC 150 or qualifying exam.) Staff

EC 355 Microeconomic Theory Fall

An analysis of the modern theory of consumer behavior and demand, production and cost, the firm and market organization, income distribution, and general equilibrium and economic welfare. (EC 155 or qualifying exam.) Mr. Claudon

[**EC 360 Urban Economics and the Economics of Urban Problems**] Offered in 1976-77.

EC 365 Environmental Economics Fall

An examination of the problems which must be resolved as society considers the costs of preserving or improving its environment versus the benefits from such expenditures. (EC 150 and EC 155 or permission.) Mr. Smith

EC 370 Monetary Theory and Institutions Fall

An introduction to the nature and role of money in an economic system; historical development of the United States financial and Federal Reserve systems; role of money in Classical and Keynesian theory; central bank policy; international monetary systems. (EC 150, EC 155 or permission.) Staff

EC 410 Econometrics Fall

Classical methods for empirically testing economic theory. After reviewing linear regression, considerable time will be devoted to special problems associated with econometric modeling. The latter part of the course will focus on simultaneous equation methods with particular emphasis on the identification problem, as well as a look at other multivariate techniques such as principle components, canonical correlation, and discriminant analysis. (EC 210, 215 or permission.) Mr. Korbel

EC 440 The Economics of International Trade Spring

A study of the economic basis of trade among nations, its composition, and impact on domestic economics. (EC 355.) Mr. Claudon

EC 450 History of Economic Thought Spring

Writings of the most notable contributors to the advancement of economic thought and analysis and critiques of their work are studied and reviewed. Authors include predecessors of Adam Smith and successors to J. M. Keynes. (EC 350 and EC 355.) Mr. Craven

EC 460 Industrial Organization and Public Policy Fall

The structure and performance of American industry are examined in the light of economic theory. Public policies toward business are reviewed and evaluated. (EC 355.) Mr. Craven

EC 470 Public Finance Spring

The operations of the American public sector in the areas of expenditure and taxation with respect to the allocative, distributive, and stablization functions of public policy. Topics include the efficiency in providing public services and methods for evaluating alternative public expenditures such as national defense, highways, education; income redistribution through the tax system as well as the incidence and shifting of various taxes; a consideration of public policy at the federal, state, and local levels of government and the possibilities for revenue sharing arrangements. (EC 350, 355 or permission.) Mr. Korbel

EC 480 Radical Economics Spring

An examination of radical critiques of the methodology and content of orthodox economics. (EC 350 or EC 355 or permission.) Mr. Craven

EC 485 Labor Economics Fall

Economics of manpower and the labor market; the role of unions; labor legislation. (EC 355.) Mr. Craven

EC 500 Individual Special Projects Fall, Spring

(Permission. See Handbook.) Staff

EC 700 Senior Research for Honors Fall

(Permission.) Mr. Korbel and Staff

English

Because of the varied nature of the Department's offerings, courses are differentiated by their second and third digits in the following manner.
Literature (00-19) Dramatic Literature (20-39) Writing (60-79)

Freshman Writing Program

All freshmen must elect one of the courses in the writing program. See complete description under "American Literature." Freshmen who have completed the Writing Program requirement may, in their freshman year, elect a second, different EL 100 level course, space permitting.

EL 101 Narrative Fiction Fall, Spring

Selections from the works of Hardy, Conrad, Joyce, Mansfield, Lawrence and Woolf. Papers will emphasize close attention to texts, on the understanding that ability to read well and thoroughly is a necessity for competent self-expression.
Mr. Elder and Staff

EL 103 Lyric and Narrative Poetry Fall, Spring

Close analysis of selected poems both traditional and modern. The course will savor the musical, metaphorical and dramatic aspects of poetry, the relationship between voice and implication, between sound and sense. "Every poem is a new metaphor inside or it is nothing."—Robert Frost. "I do not know which to prefer./ The beauty of inflections/or the beauty of innuendoes."—Wallace Stevens.
Mr. Pack and Staff

EL 105 Drama Fall, Spring

The themes and forms of comedy. Included among the works studied will be Aristophanes' *Lysistrata,* Shakespeare's *Much Ado About Nothing, As You Like It,* John Gay's *The Beggar's Opera,* Oscar Wilde's *The Importance of Being Earnest,* films of the Marx Brothers and Charlie Chaplin, and one contemporary TV comedy series. Mr. Littlefield and Staff

Admission to EL 170 and to EL 175 below is by permission. Each student must submit a sample of recent work in poetry or prose fiction. The sample, which must be received in the Department office by noon on the Thursday before classes begin, need not be more than several pages long—in fact, the shorter the better. Accomplishment, skill, style are not requirements for admission to the course: we are looking for commitment to writing as an activity.

EL 170 Prose Fiction I Fall, Spring

The course has two areas of activity: (1) the close analysis in discussions and written assignments of short stories by writers in the modern tradition, and (2) analysis and discussion of imaginative and critical writings by students in the course. (Permission. See above.) Mr. Martin and Staff

EL 175 Poetry I Fall, Spring

Each student will write at least one poem a week, exploring a variety of poetic forms. The class will examine closely and critically poems written by students and published poets, when possible tracing development of published poems through drafts. (Permission. See above.) Mr. Pack and Staff

Major Program

Required for a Major in English are (1) Interpretation of Literature: an Historical Approach (EL 201-202); (2) Distribution Courses: five courses in literature, one chosen from each of the following groups: A) EL 211, 227, 308, 404; B) EL 224, 303, 304, 321; C) EL 206, 305, 306; D) EL 207, TH 235, 313, 314, AL 301; E) EL 208, 212, TH 325, TH 326, AL 302, AL 404; (3) the Senior Program.

The Senior Program in English includes a Senior Essay or Honors Thesis and the General Examination. The Senior Essay is a one-term project; the Honors Thesis is a two-term project. Majors who have taken a writing course and an independent study project in writing may petition to undertake a creative writing project as Senior Essay or Honors Thesis. Each Senior is assigned to a faculty member for guidance in the essay or honors thesis. The General Examination receives one course-credit. The examination will be based on a general reading list and on the reading list of the Distribution Courses. Departmental honors will be awarded on the basis of grades in the General Examination and the Honors Thesis or the Senior Essay.

Literature

EL 110 Continental Fiction Spring

A study of major novels and some shorter works by 19th and 20th century European authors, including Flaubert, Turgenev, Zola, Tolstoy, Dostoevsky, Mann, Kafka, Sartre, Camus, and others. Two lectures a week with optional discussion immediately following lecture. Midterm and final exams; no papers required. This course is offered primarily for freshmen and is open on an unlimited basis to *all freshmen who have fulfilled the freshman writing requirement:* this is an absolute prerequisite. In addition, up to twenty-five students will be admitted from *each* of the three upper classes on a first-come, first-served basis at Registration. Mr. Price

EL 201 Interpretation of Literature: Chaucer, Shakespeare, Milton Fall

Major works by Chaucer, Shakespeare, and Milton will be considered: *The Canterbury Tales* (selections); three plays by Shakespeare; *Paradise Lost.* (Sophomores, Juniors, Seniors.) Staff

EL 202 Interpretation of Literature: Pope, Wordsworth, the later 19th and early 20th Century Fall, Spring

Major poems by Pope and Wordsworth (excluding *The Prelude*) will be considered during the first eight weeks; the last four weeks will be spent considering a selection of works from one or two major 19th or early 20th century writers such as Dickens, Tennyson, Hardy, Conrad, Lawrence, T.S. Eliot. (Prerequisite: EL 201.) Staff

[**EL 206 The Early Novel**] Offered in 1976-77.

EL 207 Nineteenth Century Fiction Fall

Analysis of form and theme in representative English novels of the 19th century. Novelists to be read include Austen, Dickens, Thackeray, the Brontës, Eliot, Hardy and James. Mr. Prickitt

EL 208 The Twentieth Century English Novel Fall, Spring

The course will focus on the "Modernist" writers of the first third of the century: Conrad, Ford, Forster, Woolf, Joyce, and Lawrence. Background readings from such figures as Bergson and Freud will help define the intellectual context within which these novelists work. Mr. Price, Mr. Elder

[**EL 211 Classics of Literature: Greece**] Offered in 1976-77.

EL 212 Modern British Poetry Spring

Through careful analysis of the style and thought of representative poems, this course will examine the work of the following poets: Hardy, Hopkins, Yeats, Auden, Thomas, Larkin, and Hughes. The themes of the making or the choosing of the *self* (Yeats: "Myself I must remake") through praise and lamentation, and the leaving of an inheritance, will be emphasized. Mr. Pack

EL 303 Introduction to the Literature of the English and Continental Renaissance: 1500-1610 Spring

Selected works of major English and Continental writers, in conjunction with readings in the historical and cultural background of the period. The course will include such figures as Castiglione, Erasmus, Rabelais, Montaigne, Wyatt, More, Sidney, Spenser, and Shakespeare. Non-English works will be read in Renaissance translations where possible. Juniors and Seniors.

Ms. Crehan

[**EL 304 English Literature in the 17th Century**] Offered in 1976-77.

EL 305 Poetry and Prose of the English Augustan Age Fall

A critical investigation of the artistic achievement of major writers from 1660 to 1745, conducted primarily in terms of their evaluation of the political, religious, social, moral, intellectual, and aesthetic activities of the times. Figures studied are Dryden, Addison and Steele, Swift, Pope, and Gay. Juniors and seniors. Limited to 30 students. Mr. Littlefield

[**EL 306 Prose and Poetry of the Age of Johnson**] Offered in 1977-78.

[**EL 308 Classics of Literature: Rome**]

EL 313 English Romanticism Fall

Primary attention will be given to poetry and prose selected from the six major English Romantic poets: Blake, Coleridge, Wordsworth, Keats, Shelley and Byron. The first fifty minutes or so of each hour and a half weekly meeting will consist of a lecture on pre-assigned material; the second part of each meeting will involve optional attendance at informal discussion of issues raised by the lectures and any related matters. As we go along, an effort will be made to identify characteristic concerns of the Romantic Movement as well as to say something about the social and cultural background from which they emerged. Mr. Hill

EL 314 Victorian Poetry, Nonfiction Prose and Drama Spring

This course will be centered on selections from the three major Victorian Poets: Tennyson, Browning and Arnold. (lecture and discussion format as above for English 313.) The approach is thematic and lectures will be organized around such major concerns as the poet as alien figure, materialistic determinism, the effects of the "new" science, the role of women, "the myth of Evolution," attitudes about war, the "Pathetic Fallacy," etc. Students will be encouraged to read judiciously and widely in other major Victorian writers such as Carlyle, Mill, Ruskin, Swinburne and Hardy. Mr. Hill

EL 401 Theory and Practice of Literary Criticism Fall

An historical survey from Aristotle to the present. There will be two main objectives: to understand the critical works which have so influenced our Western tradition of reading and writing and to test their theoretical frameworks against specific works of literature. The course will operate within a modified discussion format. Each week one student will have primary responsibility for presenting a given critical viewpoint and applying it to works of his or her choosing; another member

of the class will help deal with the same works in ways that reveal virtues unrecognized or unvalued by the historical system under discussion. The course's final aim will be a clearer recognition of the kinds of judgments we make in reading and an increased appreciation of the range of literary experience. (Juniors and Seniors. By permission.) Mr. Elder

EL 402 Seminar: James Joyce Spring

The evolution of Joyce's literary style and moral vision will be considered through a study of *Dubliners, A Portrait of the Artist as a Young Man,* and *Ulysses.* (Junior and Senior majors. By permission.) Mr. Price

EL 403 Seminar: John Milton Fall

A chronological study of Milton's major works, including the political prose, but excluding *Paradise Lost.* In general, the course will be concerned with Milton's developing sense of himself as poet, prophet, and divine revolutionary. (Permission.) Mr. Littlefield

EL 404 Seminar: Chaucer Fall

Reading and discussion of selections from the *Canterbury Tales,* and *Troilus and Criseyde,* with reference to intellectual background and developments in Gothic style during the 14th century. (Permission.) Mr. Martin

EL 406 Seminar: Charles Dickens Spring

The development of Dickens as a novelist and a moral critic will be considered through a reading of selected novels from *Pickwick Papers* to *Edwin Drood.* (Permission.) Mr. Prickitt

EL 407 Seminar: William Butler Yeats Spring

Extensive reading in most of Yeats' works with intensive study of selected poetry. Works to be read or read in outside the required reading of all the poetry will include: *The Autobiography, The Collected Plays, A Vision, Mythologies, Irish Fairy and Folk Tales* (ed. Yeats), *Ideas of Good and Evil, Discoveries, Per Amica Silentia Lunae, The Cutting of an Agate.* (Permission.) Mr. Hill

Dramatic Literature

[EL 224 Medieval Renaissance Drama] Offered in 1976-77.

EL 227 Greek and Roman Drama Spring

An intensive study of the plays of Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, Terrence, and Seneca. Emphasis will be on the form of Greek and Roman drama, with secondary studies in theatrical and social history. Mr. Littlefield

EL 321 Shakespeare Fall

An intensive scrutiny of language, character and theme in several of Shakespeare's major plays with a primary focus on *Hamlet* and *King Lear.* (Juniors and Seniors.) Mr. Cubeta

EL 322 Shakespeare Spring

(Seminar. Limited to twelve students. By permission.) Mr. Cubeta

Writing

EL 260 Factual Writing Fall

This course offers a varied experience in factual, as opposed to fictional writing. Each student will write a narrative; an exposition; an argument; an informal essay; an analysis; and a formal research paper, with footnotes and bibliography, subject to be chosen by the student. Mr. Clagett

EL 270 Prose Fiction II Fall, Spring

With advice and editorial assistance from the instructor, students will undertake more ambitious writing projects in order to develop their talents and to broaden their sense of technique and style. Students may choose to write stories, novelettes, novels, or, in special cases, plays. (Limited enrollment. Permission.) Mr. Clagett

EL 275 Poetry II Fall

A seminar course in which students are encouraged to undertake writing projects, with advice and editorial assistance from the instructor, in order to discover where their talents may lie and to broaden their sense of technique and style. The class will meet once a week to discuss samples of contemporary writing and each other's work. Each student will also work in conference with the instructor. (Limited to twelve students. Permission.) Mr. Pack

EL 279 Techniques of Research Spring

This course is designed to train students in the art of research for material to be used in various kinds of advanced writing, including biography, nonfiction, fiction, and scholarly writing. The choice of the topic is open to the student. (Limited enrollment. Permission.) Mr. Clagett

Advanced Writing: Students may undertake writing at the 500 or 700 levels. Candidates are asked to submit a description of their project and samples of their writing to a departmental committee two weeks before registration.

Special Projects

The Department will consider applications from qualified students who wish to undertake special projects in literature, dramatic literature and writing. A student proposing to undertake such a project should submit a detailed proposal to his adviser two weeks prior to registration.

EL 500, 520, 560 Special Projects Fall or Spring
Staff

Senior Program

The Senior Program includes a General Examination (EL 705) and a one-term Senior Essay or a two-term Honors Thesis (EL 700 or 760). Normally all seniors register for one unit of EL 700 or 760 in the Fall Term and take the General Examination (EL 705) in the Winter Term. Students undertaking two-term Honors Theses programs register for and complete them during Spring Term.

All Senior Essays (one-term writing programs and projects) must be completed no later than the end of the first week of Winter Term. Late essays will

receive a grade of no higher than C. No essays will be accepted after the end of Winter Term. All Honors Theses (two-term writing programs and projects) must be completed no later than the end of the second week of classes after Spring Recess. Late theses will receive a grade no higher than C and will have no oral examination or outside reader. No Honor Theses will be accepted after May 1. No one is permitted to register for the second term in an Honors Thesis program unless he or she has accomplished and submitted a substantial amount of work during Fall Term.

See also Division of Humanities.

The Program in Environmental Studies

The interdisciplinary major in Environmental Studies has fields of emphasis in any of the Natural Sciences, Economics and Geography. Middlebury's locale affords a unique opportunity for field work in these areas and the major is designed to take full advantage of this opportunity. It is designed for the student who comes to Middlebury with an interest in such interdisciplinary careers as terrestrial or marine ecology, oceanography, earth science, environmental engineering, physiography, pollution control, wildlife management, urban planning, human ecology or environmental economics.

The curriculum is carefully constructed from the College's offerings in consultation with the individual student. Students majoring in Environmental Studies take an emphasis core of courses in Biology, Chemistry, Economics, Geography, Geology, or Physics plus cognates in science and non-science. The depth in his field of emphasis and the breadth in the cognate courses give the student a foundation and perspective in environment that are appropriate to the liberal arts tradition. The major is designed as preparation for graduate school in most cases. Also, the breadth releases the senior Independent Study from the confines of a departmental major permitting instead the study of a topic that has interdisciplinary aspects and permits occasional interdisciplinary seminars.

Students interested in this program should consult Professor Howard E. Woodin, Coordinator of Environmental Studies, for further information and assignment to appropriate advisers.

Minimum Requirements for a Major in Environmental Studies. An Environmental Studies Major requires a *number of departmental "Major Track"* courses plus *two or three* senior thesis* courses in the elected field of emphasis. *In addition* and more particularly the following conditions apply:

Ecology—(Biology Dept.) (5 upper class Biology + 2 Senior Thesis)
plus: a) 6 semesters of Chemistry, Geology, Mathematics or Physics
b) 5 semesters of pertinent non-science including Geography
**c) A passing knowledge of a modern foreign language

Environmental Chemistry (Chemistry Dept.) (5 upperclass Chemistry + 2 Senior Thesis)
plus: a) 6 semesters of Biology, Mathematics or Physics
b) 4 semesters of Geography, Geology or permission courses

Human Ecology (Geography Dept.) (5 upperclass Geography + 3 Senior Thesis)
plus: a) Biology 110 (or equivalent), 311, 312
b) 2 Geology courses plus 3 elective sciences
**c) Working knowledge of modern foreign language

Environmental Geology (Geology Dept.) (5 Geology + 3 Senior Thesis)
plus: a) 6 semesters of Biology, Chemistry, Mathematics or Physics
b) 5 semesters of other pertinent non-science courses including Geography

Environmental Physics (Physics Dept.) (3 upperclass Physics + 3 Senior Thesis)
plus: a) Mathematics 112, 113, 201 and Physics 109, 110, 332
b) 4 semesters of Biology, Chemistry, or Geology
c) 4 semesters in pertinent non-science including Geography

Environmental Economics (Economics Dept.) (5 upperclass Economics + 2 Senior Thesis)
plus: a) 5 semesters of Biology, Chemistry, Physics or Geology
b) 6 semesters of pertinent cognate courses from Mathematics, Political Science, Sociology or Geography

* Students doing practice teaching under the Teacher Education program may, with permission, take only two units of Senior Thesis.

** Usually similar to Middlebury entrance requirements.

French

The French Department hopes to develop students' interest and competence in linguistic communication, ability to read and criticize literature in French, and familiarity with the major themes and perspectives of the French-speaking world.

We consider command of the French language to be the essential ingredient and prerequisite to serious and successful pursuit of such aims. On the other hand, we recognize that an individual student may choose to pursue one of the interrelated areas in particular, and that in any case a successful major in French will benefit not only from these interrelations but from work in related areas of intellectual activity, such as other languages and literatures, fine arts, history, philosophy, sociology, etc. Accordingly, requirements for the major are designed to develop students' ability to read and discuss relatively complex literary and social documents, and thereafter to leave them sufficient freedom to pursue their own particular bent, in consultation with an adviser.

Students interested in studying in Paris with the Middlebury Junior Year program should contact the department chairman prior to registration for their sophomore year.

Students interested in doing independent work (FR 500, 700) should obtain approval of their project prior to registration for the semester in which the work is to be undertaken.

Required for the major: FR 205-206 or the equivalent; any two courses from 207, 208, and 209 or the equivalent; four courses at the 300 level or above. Total of not fewer than 10 courses, not more than 14. Courses taken in France will normally be at the 300 level.

FR 101 Beginning French Fall

An active introduction to listening, speaking, reading and writing. Three class meetings, two drill sections and laboratory. Staff

FR 102 Beginning French Spring

Continuation of FR 101, dealing with more complex French. (FR 101.) Staff

FR 201 Intermediate French Fall, Spring

An active and comprehensive review of language skills, with emphasis on the sound system and syntactical problems. Designed for students whose background in French is limited or shaky. Mr. Simon and Staff

Prerequisites to the Major

FR 205 Liberated Expression Fall, Spring

A course designed to increase and perfect the ability to express oneself in spoken and written French. Emphasis on precision, variety and vocabulary acquisition. Sections limited to 15 students. Ms. Rifelj and Staff

FR 206 Liberated Expression Fall, Spring

Continuation of FR 205, with emphasis on social use of the language, via analysis and discussion of themes and issues in contemporary French society as reflected in newspaper articles and recorded documents. (FR 205 or by permission.) Ms. Rifelj and Staff

Each of the following three courses, of which the French major must have taken at least two, is a survey of some of the major figures and trends in French poetry, theater or prose, designed to acquaint the student with the history of the genre, the technical problems involved, and the use of French critical terminology in the study of literature. Mr. Thiher and Staff

FR 207 Introduction to French Poetry Spring

FR 208 Introduction to French Theater Fall, Spring

FR 209 Introduction to French Prose Fall, Spring

Language, Literature, Civilization

[**FR 304 Advanced Composition**]

FR 305 Advanced Language Practice Spring

Intensive work in composition, stylistics, and grammatical analysis. Attention will be given to lexical precision and differentiation between spoken and written language. Mrs. Fischer

[**FR 306 The Art of Translation**]

[**FR 307 Literature of the Middle Ages**]

FR 309 Introduction to the Literature of the French Renaissance Spring

Selected readings of various Renaissance poets with special emphasis on Rabelais and Montaigne. Mr. Simon

[**FR 310 Moralistes and Philosophes**]

FR 312 The French Novel from Lafayette to Laclos Fall

Readings in the novel and *conte,* largely in the eighteenth century, with special emphasis on *vraisemblance,* morality and sentiment, the concept of the hero, and the relation of the novel to Enlightenment thought. Ms. Rifelj

[**FR 315 Nineteenth Century Novel**]

[**FR 316 Nineteenth Century Poetry**]

FR 317 Modern French Theater Fall

Playwrights and directors of the twentieth century. Mr. Barenbaum

[**FR 318 Modern French Poetry**]

[**FR 319 The Modern Novel Between the Wars**]

[**FR 320 The Contemporary Novel**]

FR 321 French Classical Theater: Toward a definition of French Classicism Fall

Centered on the works of the three prominent playwrights of the 17th century in France (Corneille, Molière, Racine), readings will also include some prose and poetry to give a larger view of classical forms and ideas. Mr. Simon

FR 325 Romanticism Spring

Through readings in various genres and a look at art, music, and the historical situation, an attempt to define Romanticism despite its diversity. Texts will include works by Balzac, Stendhal, Hugo, Musset, Nerval, and Baudelaire, with some references to later writers. Ms. Rifelj

[**FR 331 Images of Women from Corneille to Laclos**]

FR 350 French Cinema Fall

Studies in the development of French cinema, with emphasis placed on leading directors, as well as on the language of film criticism and analysis. In addition to viewing films, students will do reading in the history and theory of film. Students will see each film twice. After each film showing there will be a regular class presentation and discussion. The class will therefore meet twice each week for approximately three hours at each class time. Mr. Thiher

FR 370 Stylistics Fall

Theories of three schools of linguistic/literary studies—the Russian Formalists, the Prague School, and the French Structuralists—will be examined in essays by Baxtin, Volosinov, Jakobson, Mukarovsky, Barthes, Greimas, Chabrol. . . . Literary selections will be analyzed in class in the light of these theories. Students will undertake their own analyses of chosen texts. Ms. Herschensohn

FR 375 Introduction to the Languages of Criticism in France Spring

Introduction to the various contemporary critical approaches now utilized in France (Marxist, psychoanalytic, structuralist, thematic, etc.) with selected readings of literary texts to which these approaches have been applied (Racine, Baudelaire, Mallarmé, etc.) Mr. Thiher

[**FR 413 Aspects of Contemporary France**]

FR 442 Workshop in French Theater Spring

Group study of a play in French, concentration on the play itself, the problems of production, and the presentation of the play to various audiences (high school, other colleges, Middlebury). Students will participate as actors and technicians and will have an active "teaching" role to play as they explain the play and the production to their audiences. Mr. Barenbaum

FR 500 Independent Projects

Qualified students may be permitted to undertake a special project in reading and research under the direction of a member of the department. Approval of the project should be obtained prior to registration for the semester in which the work is to be done. Staff

FR 700 Senior Research

For Senior majors who are candidates for Departmental Honors. Students should seek out an adviser and submit a proposal to the department prior to registration for the semester in which the work is to be undertaken. Staff

See also Division of Foreign Languages.

Geography

The essence of geographic study is the analysis of phenomena in a spatial context, especially the "where" and "why" of human activities. In their attempt to explain the differences which exist from place to place over the earth's surface, geographers collect, analyze and integrate data from both the physical and social sciences. They examine such physical elements as landforms, climate, soils and vegetation, and interpret them in terms of the distribution of people, their ways of making a living and the social and political patterns they have developed. Because man's perception of the environment and his interactions with it are constantly changing, geography seeks to understand how present world patterns have evolved from the past and how they might be modified in the future.

Required for a Major: GG 101, GG 102, GG 201, GG 202, GG 211, GG 302, GG 401, GG 412, one regional course numbered from GG 311 through GG 317, and Senior Research (GG 700). In the Spring Term of their Junior year, majors must select a topic for a senior thesis in consultation with a departmental adviser. The Fall and Winter Terms of the Senior Program are devoted to writing the thesis and the Spring Term to its oral presentation, defense, and final editing for submission no later than May 1. The Department also participates in the interdisciplinary Environmental Studies major through the Human Ecology option.

Cognate courses for a Major in Geography range over a broad field and should be selected from other departments according to one's interest in Geography, and with approval of the adviser. Students contemplating graduate studies and/or professional careers in city and regional planning may also avail themselves of Independent Projects in Spatial Analysis and Human Ecology (GG 500) designed to meet their special needs.

GG 101 Introduction to Spatial Analysis I: The Developed World Fall

A survey of physical and cultural factors which influence the distribution of man and his activities on the earth's surface. The first term is devoted to developing skills in geographic analysis with special reference to the developed regions of the world, i.e. Europe, the Soviet Union, and Anglo-America. (GG 101 is a prerequisite for GG 102 and all other courses in Geography.) 3 hrs. lect., 3 hrs. lab.

Mr. Malmstrom

GG 102 Introduction to Spatial Analysis II: The Developing World Spring

A survey of physical and cultural factors which influence the distribution of man and his activities on the earth's surface. Skills developed in GG 101 are applied in the analysis of the countries and regions of Asia, Africa, and Latin America. (GG 101 is a prerequisite for GG 102.) Mr. Illick

GG 201 The Environment of Man: The Physical Setting Fall

A systematic examination of the elements of the physical environment. Landforms, climates, soils, vegetation, minerals and water resources will be studied by means of field trips, maps, and photo-interpretation. 3 hrs. lect., 3 hrs. lab. (GG 101.) Mr. Illick

GG 202 Spatial Analysis of Economic Activity Spring

An analysis of the origins, nature, and distribution of man's economic activities over the world. The evolution of subsistence, commercial and planned economies will be studied in a regional context. (GG 101.) Mr. Malmstrom

GG 211 The Environment of Man: The Urban Setting Fall

An examination of the evolution, structure and function of city systems in selected regional settings. Critical factors influencing urban location and internal

spatial organization will be identified, and the dynamics of these structures discussed. Cities will be considered both as expressions of social initiatives, and as they, in turn, influence urban man. (GG 101.) Mr. Clark

GG 302 Techniques of Spatial Analysis: Remote Sensing and Cartography Spring

An introduction to the history, compilation, design, and construction of maps. Training in the techniques of preparing maps from field surveys, air photographs, library, and statistical and computer data. Particular attention to the interpretation of images produced by radar, sonar, infrared and other sensors. Field sketch and overlay maps as well as three-dimensional diagrams and models will be produced. 3 hrs. lect., 3 hrs. lab. (GG 101.) Limited to 20 upperclassmen. Mr. Illick

Seminars in Spatial Analysis: Contemporary economic, social, and political problems of major world regions will be systematically examined in a spatial and environmental context. Not open to freshmen. (GG 101.)

[**GG 311 Anglo-America**] Offered in 1976-77.

[**GG 312 Latin America**] Offered in 1976-77.

[**GG 313 Europe**] Offered in 1977-78.

GG 314 Africa South of the Sahara Fall
Mr. Clark

GG 315 Soviet Union Spring
Mr. Malmstrom

GG 316 Middle East and North Africa Fall
Mr. Illick

[**GG 317 South and East Asia**] Offered in 1976-77.

GG 350 Social Geography Spring

A spatial and ecological investigation of man's relation to both man-made and natural environments emphasizing environmental perceptions, attitudes and values as they influence the appraisal, organization, use and accommodation of environmental contexts. Topics will include the socio-spatial structure of community, origin and diffusion of cultural innovations, human response to hazardous environments, spatial dimensions of human conflict, and perspectives on the geography of population. Not open to freshmen. (GG 101.) Mr. Clark

GG 401 Spatial Analysis of Political Activity Fall

The study of the state as a geographic phenomenon, with emphasis on the spatial, cultural, and economic factors that influence its emergence, growth, and relationships with other states. The present world situation will be analyzed in terms of geopolitical principles. (GG 101 and junior or senior status.) Mr. Malmstrom

GG 412 Applied Spatial Analysis: Principles of Planning Spring

An examination of urban, regional, and national planning problems and contexts emphasizing prediction, choice and guidance. Attention will focus upon metropolitan and regional contexts of the more developed world as they relate to the problems and prospects of urban society. (GG 101 and junior or senior status.) 3 hrs. lect., 3 hrs. lab. Mr. Clark

GG 500 Readings and Research in Spatial Analysis and Human Ecology Fall, Spring

A course arranged to fulfill the research needs of students majoring in Geography. Staff

GG 700 Senior Research Fall, Winter, Spring
Staff

Geology

With the Green Mountains to the east, the Adirondacks and Lake Champlain to the west, the environs of Middlebury College afford an excellent setting for study and research in geological, oceanographic, and environmental science. The curriculum takes advantage of this setting by stressing field-oriented and laboratory supported inquiry of problems in all facets of earth science. Since Vermont is a classic area for study of mountain system evolution the program relates geologic process to the origin and evolution of global tectonic patterns integrating data from the world's oceans and continental areas.

Earth Processes (GL 171), Elements of Oceanography (GL 161), Environmental Geology (GL 152), and Global Tectonics (GL 172) introduce students to active research areas in geological science and are vehicles for acquiring the basic understanding of processes which have shaped the earth. Students can enter the program in geological science through any one of these courses. They may then concentrate in these or other areas depending on where their interests develop. Interdisciplinary concentration is encouraged and advanced work in related sciences may be counted toward the 12-course minimum for the major. Work in the geological sciences culminates in a senior thesis that consists of an original contribution based on field and/or laboratory investigations by the student.

Students contemplating concentration in geological science should consult with faculty to plan any of many possible programs. Combinations of work in earth science with other fields is recommended. No fixed program of courses is required of any student and a variety of concentrations can be set up to suit student needs.

GL 152 Environmental Geology Spring

Analysis of examples that show geologic constraints on man's activities. Emphasis is on ground water, rivers, the shore zone, the San Andreas fault, and fossil fuels. Laboratory: indoor 5-week map project; 5-week field study of a local environmental problem. Three hours lect., four hours lab. Mr. Baldwin

GL 161 Elements of Oceanography Fall

Oceanographic exploration introduced through study of ocean basins and continental margins. The multidisciplinary nature of oceanography is emphasized by using principles of marine geology, geophysics, geochemistry, and biology to resolve contemporary problems. Techniques of data collection are taught aboard the college's research craft, as part of continuing research on the evolution of Lake Champlain. Three hours lect., four hours lab. Staff

GL 171 Earth Processes Fall

The processes and phenomena that make the Earth a dynamic planet with emphasis of the development of the Earth's crust in space and time. Lectures: formation, destruction, and transformation of rocks; evolution of the atmosphere and hydrosphere; structure and chemistry of the Earth; and extraterrestrial geology. Laboratory: field and laboratory investigations aimed at the understanding of Vermont geology. Three hours lect., four hours lab. Staff

GL 172 Global Tectonics Spring

Sea-floor spreading and continental drift, origin and evolution of mountain systems, and concepts of plate tectonics viewed in light of recent advances in the geology and geophysics of ocean basins and continents. Laboratory: regional tectonic synthesis, field problems in Vermont geology. Three hours lect., four hours lab. Mr. Coney

GL 361 Sedimentary Processes Fall

The environment of deposition of sedimentary rocks is inferred from study of their fossils, textures, mineralogy, and primary structures, which are a response to physical and chemical processes. Laboratory: field study of shelf and deep-water assemblages; thin-section and hand-specimen study of field collections; introduction to the study of invertebrate fossils. Three hours lect., four hours lab. Mr. Baldwin

GL 362 Stratigraphic Analysis Spring

Study of facies, correlation, and geochronology of sedimentary rock assemblages, in order to determine rates of geologic processes and nature of plate tectonic events. Major independent project and report on stratigraphic analysis of a formation, from the literature. Laboratory: correlation by microfossils and invertebrate macrofossils; field study of a local formation. Three hours lect., four hours lab. Mr. Baldwin

GL 381 Tectonics Fall

The behavior of earth materials in a dynamic earth. Geometric, kinematic, and dynamic analysis of deformational structure. Regional tectonic setting of earth structures. Laboratory: detailed mapping and interpretation of complex structures in Vermont geology; quantitative analysis and interpretation of deformation as shown on maps and aerial photographs; stereographic analysis of complex fabrics from varied local field areas. Three hours lect., four hours lab. Mr. Coney

GL 392 Petrology Spring

An inquiry into the origins, tectonic settings, and evolutions of magmas, utilizing field data, mineralogy, phase equilibria, and geochemistry of the igneous rocks. Laboratory will include field studies in Vermont and adjacent New York as well as extensive thin section studies of rock suites chosen to illustrate the varied petrogeneses of igneous rocks. Three hours lect., six hours lab. Staff

GL 441 Advanced Tectonics Fall

Principles of regional tectonic analysis and discussion of regional tectonic processes in space and time. Application of plate tectonic concepts to regional tectonic evolution: Laboratory: Compilation and interpretation of regional tectonic maps and data, writing of regional tectonic reports. (GL 381.) Mr. Coney

GL 462 Evolution of Ocean Basins Spring

Synthesis of processes that determine the physiography, stratigraphy, and tectonic evolution of the sea floor. Emphasis on integration of geophysical data with results of the Deep Sea Drilling Project. (Advanced work in science.) Three hours lect., five hours lab. Staff

GL 481 Geophysics Spring

An introduction to the principles and methods of geophysics with emphasis on techniques and geological implications of seismology, earth magnetism, gravity and heat flow, and geochronological studies. Laboratory: Geophysical investigation of field problems and integration of geophysical and geologic data. (PH 109, 110.) Staff

[GL 491 Metamorphism and Metamorphic Rocks]

GL 550 Readings and Research Fall, Spring

Individual or group independent study, laboratory or field research projects, readings and discussion on timely topics in earth and environmental science. Staff

GL 750 Senior Research

A three unit senior program dedicated to original research in geological science resulting in a written thesis which must be orally defended. Staff

German

Departmental students are normally expected to take eight courses in German Literature. Since all higher-level courses are conducted in German, completion of German 202 or its equivalent is prerequisite for acceptance into the Department. The Department reserves the right to administer a placement test in order to determine the course with which a student should begin study of German at Middlebury. No credit is given for Advanced Placement. The Department expects that all majors will have had at least one semester in a German-speaking country by the time they graduate. Junior majors will normally spend the second semester at the Johannes Gutenberg-Universität in Mainz. There is no comprehensive examination in the senior year.

GN 101 Elementary German Fall

The course consists of three lectures, three drills and laboratory. The lectures pre-drill the student, i.e. students are guided through the exercises they are to prepare for the following day's drill. *Drills:* drilling is done in groups of about ten students. Since they have been through the exercises in lecture, students are expected to display absolute and automatic control of drill assignments. Staff

GN 102 Elementary German Spring

Course-format as GN 101. Upon completion of German grammar, reading materials will be introduced. GN 102 begins with Winter Term and runs concurrently with it, although on a reduced schedule. (GN 101 or equivalent.) Staff

GN 201 Intermediate German Fall

The course meets three hours a week in sections of about ten students. It begins with a comprehensive grammar review; this is followed by a phase in which literary texts are used as a basis for further language instruction and for the acceleration of reading speed. In the final phase, progress in the language is supplemented by textual interpretation. (GN 102 or equivalent.) Staff

GN 202 Advanced German Spring

Course-format as GN 201. Modern German texts will be read and interpreted, and the students will be introduced to the methods of literary analysis. The course will further increase the student's fluency in spoken German and his facility in reading. Staff

(Prerequisite for all 300-level courses and higher is GN 202 or the equivalent.)

[GN 301 Modern German Literature]

GN 302 Twentieth Century Literature Fall

The course will trace the problem of crime and the criminal as portrayed in 20th century German drama and fiction. Major authors to be considered are Brecht (*Mann ist Mann, Dreigroschenoper*), Kafka (*Der Prozess*), Frisch (*Graf Oderland, Biedermann und die Brandstifter*), Dürrenmatt (*Besuch der alten Dame, Das Versprechen*), and Handke (*Die Angst des Tormanns beim Elfmeter*).

Ms. Summerfield

[GN 303 Stylistics]

[GN 305 The German Novelle]

[GN 306 The German Novelle]

[GN 307 The German Novelle]

GN 310 German Lyric Poetry Fall

The course will begin with a survey exposure to the forms of German poetry from Minnesang to Protest-Song. Modern texts will then be stressed to introduce several methods of interpretation and criticism. During the final weeks of the course each student will choose a modern poet and write an interpretive essay. (Prerequisite: at least one prior German course at the 300-level.) Mr. Sparks

[GN 320 Hugo von Hofmannsthal]

[GN 401 The Emergence of German as a Literary Language]

[GN 402 The Establishment of German as a Literary Language]

GN 406 Romanticism Fall

This course will provide the student with techniques for examining a period in depth. The emphasis will be on narrative forms. The course will give the student a basis from which to understand romantic themes and forms as they are carried forward into the twentieth century. Readings will include works by E. T. A. Hoffmann, Eichendorff, Tieck, Wackenroder, Novalis, Brentano and von Arnim. Mr. Vail

[GN 407 Romanticism]

GN 410 Seminar: German Drama Spring

An investigation of drama from Naturalism (G. Hauptmann) through Expressionism (C. Sternheim) to more eclectic forms and topics in Brecht and his successors to the "documentary theater" of the Seventies. Plays to be read and discussed will include Hauptmann's *Der Biberpelz,* Sternheim's *Die Hose,* Brecht's *Mahagonny,* Zuckmayer's *Teufels General* and Kipphardt's *Oppenheimer.* Scenes from other plays of the period will also be discussed, among them Brecht's *Galilei,* Göring's *Seeschlacht,* Kaiser's *Gas.* Mr. Huber

[GN 414, GN 415 Seminar: The German Novel]

GN 500 Independent Study

See also Division of Foreign Languages.

History

The History major combines an introduction to several areas of historical knowledge with intensive training and practical work in historical research. Majors must take at least one semester lecture course in early history, choosing from the following: HI 103, 205, 207, 313, 325, 326, 327, 328 and must take at least three semester courses outside their main field of concentration (the fields are defined as Europe, America, and Non-Western). One course may count towards the fullfillment of both these requirements. Each major must also take a Research Seminar (HI 401-419 or, when a research seminar is not offered in a particular field, HI 500) and a Readings course (HI 420-30) by the end of junior year. Senior majors, having chosen a topic the previous spring, take Independent Study, as described below under HI 700, and may, if they wish, enroll in the senior seminar in the spring. With departmental permission, certain cognate courses (normally not exceeding two) may be counted for credit toward a major in History. In addition, PA 231, Philosophy of History, counts for credit toward the History major.

Required for all History majors: At least ten courses (winter term senior independent work may be counted), including a Research Seminar, a Readings course, and a senior project. After 1976, this project will be a two-semester thesis.

HI 103 Crises in European History Fall

An examination of three critical periods of early modern European history in which the established order found itself under attack: the German Reformation, the English Civil War, and the French Enlightenment. (One section of this course, limited to 15 students, will serve to fulfill the Freshman Writing Requirement.) (Primarily for freshmen and sophomores; juniors and seniors admitted by permission only.) Mr. Tillinghast and Staff

HI 104 Modern Revolutions Spring

A comparative study of revolutions, radical mass movements, and revolutionaries in modern history. The course explores the problems of trying to conceptualize revolution and, through a study of the great revolutions of modern times, points toward the possibility of establishing some comprehensive generalizaions about revolution. (Primarly for freshmen and sophomores; others admitted by permission only.) Miss Lamberti and Staff

HI 203 United States History, 1492-1865 Fall

A survey of American history from Old World origins to the end of the Civil War. The coverage will be thematic and topical, with emphasis upon selected political, social, and intellectual developments. Mr. Catton and Staff

HI 204 United States History, 1865-1975 Spring

A survey of American history from the Civil War to the present, with special attention to the impact of industrialism upon social, political, and intellectual activity. A continuation of HI 203, but an independent course; there are no prerequisites. Not open to students who took HI 203 in 1974 or earlier.

Mr. Catton and Staff

HI 205 Early African History Fall

A survey of the development and interaction of African societies from their prehistoric origins to the beginning of the modern colonial period in the mid-19th century. Mr. Spencer

HI 206 Modern African History Spring

A survey of sub-Saharan economic, political, and social history from the mid-19th century to the present. The course will focus on the colonial situation and African reactions to it, with secondary emphasis on the origins and structure of the current tensions in Southern Africa. Mr. Spencer

HI 207 Imperial China Fall

The course will concentrate on the development of Chinese institutions and Chinese thought in the years before the impact of the West. Readings will be in a wide range of primary and secondary sources, including literature as well as more historical materials. Mr. Clifford

HI 208 Modern Chinese History Spring

Starting with the disruption of the Chinese world view by the western invasions, the course will concentrate on the collapse of the empire, and the many-faceted revolution which has been the primary feature of the 20th century. Mr. Clifford

HI 209 The History of Japan Fall

An examination of certain facets of Japanese history, the course will concentrate particularly on those aspects of Japan's past which have made possible her rise in the modern world. Roughly half the course will deal with the years since the Meiji Restoration, the growth and collapse of the Japanese empire, and Japan's recovery since 1945. Mr. Clifford

HI 302 Economic History of the United States Spring

An analysis of American economic development from the seventeenth century to the present, with frequent attention to European influences and emphasis upon the interaction between economic activity and social, political, and intellectual history. Mr. Catton

HI 305 Twentieth Century America (1900-1940) Fall

A study of the political and social history of the United States during the early 20th century, concentrating on the Progressive Era, the First World War, the 1920's, the Great Depression and the New Deal. Mr. Jacobs

HI 306 Twentieth Century America (1938-1970) Spring

A study of the political and social history of the United States during the mid-20th century, concentrating on the road to World War II, the War, the Cold War, and post-war America from Truman's Fair Deal to the New Frontier, the Great Society, and the end of an era of progressivism. Mr. Jacobs

HI 307 Black History Spring

An examination of the Black experience in America. Emphasis will be on the nature of slavery, the importance of urbanization, and the various strategies used by Blacks to gain equality and a sense of identity throughout American history. Mr. Spencer

[HI 309 History of American Education]

HI 313 Russian History (9th Century-1796) Fall

A study of Russia's development from the 9th Century through Catherine the Great with emphasis on cultural and political nation building in Kievan Rus, Muscovy, and the early Empire. Mr. Brainerd

HI 314 Russian History (1796-1974) Spring

Russia in the modern period, from 1796 through the Revolution of 1917 and the Stalin era to collective leadership and "detente," stressing the major internal forces of modernization and the influence of western examples. Mr. Brainerd

HI 315 History of Modern Europe (1815-1890) Fall

An analysis of political institutions, social and economic changes, religious and intellectual developments, and international relations. Students are encouraged to concentrate in a special area or country. Lectures are interpretive. Reading assignments include the finest interpretive studies on European history.
Miss Lamberti

HI 316 History of Modern Europe (1890-1950) Spring

Continues the approach of HI 315. Special attention to the rise and nature of modern totalitarianism. Miss Lamberti

HI 318 English History as a Background for English Literature Fall

From the Elizabethan period to the First World War. Stress will be on intellectual and social history, the development of forms of society, and of ways of looking at it, that made it useful for authors to treat literary themes at particular times in particular ways. Mr. Tillinghast

[**HI 325 The Civilization of the Dark Ages**] Offered in 1977-78.

HI 326 The Medieval Outlook, 1050-1300 Spring

During the eleventh century, something happened to the peoples in Western Europe: an outburst of energy in every field transformed them within 200 years from semi-barbarians into members of an alert and driving group of cultures. Then the advances began to slow down. The course will try to find out why.
Mr. Tillinghast

[**HI 327 Europe in the Renaissance**] Offered in 1976-77.

[**HI 328 The Reformation**] Offered in 1976-77.

HI 401-19 Research Seminars

The purpose of the research seminar is to introduce the student to methods of research and historical writing. During the first few weeks the student reads in the area of the course and is introduced to bibliographical and methodological problems. During the rest of the course the student writes a long paper on a subject of his choosing in consultation with the instructor. The research seminar is required of majors in their junior year and is open to others by permission. The Department may permit a student to write an equivalent research paper in a field not covered by the research seminars, in order to fulfill this requirement; in this case he should register for HI 500. The only research seminar in American history is HI 402.

HI 402 Writing and Research in American History Spring

The course, taught by the American history staff, emphasizes methodology and historiography, and students will be able to select research topics, in consultation with the staff, from the broad range of the American past. All students will write and submit a research paper based on primary source material. No 500 projects in American History will fulfill the research seminar requirement.
Mr. Catton and Mr. Jacobs

HI 411 Writing and Research, War of Illusions: How the First World War Began Fall

The class will study the fears, rivalries and conflicts which lined up the European Great Powers into two armed camps, the extent to which the War was the logical extension of expansionist aspirations, and the pursuit of power politics, and what assumptions and illusions about war permeated public opinion, diplomacy, and military strategy. The class will also reconstruct what happened during the fateful five weeks from June 28 to August 4, 1914, with emphasis on the decisions, miscalculations and behavior of the statesmen, diplomats, and generals who brought war as a fact. Miss Lamberti

HI 413 Writing and Research, Africa after Independence Spring

How have African states coped with freedom from colonial rule? A discussion of the post-colonial period focussing on East and Central Africa. Mr. Spencer

HI 415 Writing and Research, Tudor Society Fall

We shall look at what happened to later medieval English society at three crucial points: in 1485, in the 1530's, and in the 1570's. Mr. Tillinghast

HI 420-30 Readings Courses

Unlike the courses below the 400 level, which are primarily lecture courses, the readings courses are smaller group discussions of particular periods or topics. They are open to all students, although in cases of overcrowding, history majors will be given priority. (Required of history majors prior to completion of junior year. Note that normally HI 500 cannot be used to fulfill the readings course requirement in American History.)

HI 420 American Historical Writing Fall

An examination of the changing interpretations of American history, from George Bancroft and the nineteenth century Romantic Historians to the "Consensus" and "New Left" writers of the 1950's and 1960's, with particular emphasis upon the Turner-Beard-Parrington group of Progressive historians and a few of the principal mid-twentieth century writers: Hofstadter, Nevins, Potter, Schlesinger. Some of the reading will focus upon changing interpretations of the Revolutionary, Jeffersonian-Jacksonian, Civil War, and Populist-Progressive eras. Weekly discussions. This course will replace all other Readings Seminars in American History. Mr. Catton and Mr. Jacobs

HI 422 The Age of Exploration in Africa Fall

A review of the first stages of the expansion of Europe into Africa—the search for gold, slaves and fame. Mr. Spencer

HI 423 The Stuart Period Spring

A study of the political and constitutional crises of the seventeeth century which led to the execution of a king, England's experiment with republican government, the restoration of the monarchy, and the overthrow of the Stuart house in 1688. Mr. Tillinghast

HI 424 Communism in China Spring

The course will deal with the application of Marxism and the Russian model to China, the role of war in the formation of revolutionary ideology, and the emergence of a new kind of communist society in China since the war. Readings in writings of the leaders as well as secondary sources. Mr. Clifford

HI 426 History and Historiography in the Modern Era Fall

Is the writing of history a science or an art? Is objectivity about the past possible? Is it desirable? What is the interest of the past for historians and for their audiences? These and related questions will be examined, with readings in historiographical thought and exemplary historical works from the early nineteenth century to the present in Europe and America. Mr. Brainerd

HI 500 Special Research projects (Permission.) Fall, Spring
Staff

HI 700 Senior Independent Study Fall, Winter, Spring

Seniors in the class of 1976 will choose, with departmental advice and approval, one of the following Independent Study projects: (1) a two-term thesis, departmental or interdepartmental, the work to be done normally in the fall and spring terms; and the following one-term projects: (2) an interdepartmental essay, jointly approved and directed by an adviser in both departments; (3) an historiographical essay; (4) a bibliographical essay; (5) an oral history project; (6) a translation project; and (7) a conventional research paper. Eligibility for honors will be confined to students completing the two-term thesis, although outstanding performance in any of the other undertakings may result in permission to continue and complete it during a second term and become eligible for honors. Starting with the class of 1977, all seniors will be required to write a two-term thesis.

HI 705 Teaching Assistantship Fall, Spring

Teaching assistance in discussion sections of certain lecture courses. Permission of the course instructor is required.

HI 710 Topics in Comparative History Spring

Senior Seminar. Readings and discussions in problems chosen by staff and students, encouraging a comparative study of problems common to different periods and different fields. Mr. Brainerd and Staff

Mathematics

The Major includes work in analysis through advanced calculus, a year of modern algebra, plus work in several elective fields. Probability and statistics, topology and geometry, real and complex analysis, number theory and advanced algebra and an introduction to digital computers are available to all majors. Each major will make a careful choice of electives with the help of an adviser in order best to fulfill his or her particular mathematical needs.

Advanced placement is offered freshmen whose secondary training indicates they can successfully take the sophomore course.

Seniors must register for MA 704 in the Spring Term.

Required for the Major: MA 112, MA 113, MA 201, MA 202, MA 301, MA 302, MA 401, MA 402, three electives in the Department and MA 704. Physics is recommended. Under special circumstances, certain courses in other departments may serve in lieu of one or two of the required departmental electives, and for a student with a strong interest in applications of Mathematics, another Mathematics course may serve in lieu of MA 402.

MA 101 Introduction to Finite Mathematics Fall

Selected topics from areas of finite mathematics; designed for students who have had only three years of secondary school mathematics. Elements of mathematical logic and of the theory of sets; partitions, binomial coefficients; introduction to probability theory, conditional probability; matrices, solution of linear equations. Staff

MA 112 Mathematical Analysis-I Fall, Spring

Introductory analytic geometry and calculus; designed for students with four years of secondary school mathematics. The differential calculus of algebraic functions and applications; the indefinite and definite integral, area under a curve. Staff

MA 113 Mathematical Analysis-II Fall, Spring

A continuation of MA 112; may be elected by freshmen who have had an introduction to analytic geometry and calculus in secondary school. Applications of integration to volumes, length of arc, surface of revolution, pressure, and work; the calculus of the elementary transcendental functions; hyperbolic functions; polar coordinates; determinants. (MA 112 or permission.) Staff

MA 130 Introduction to Computers Fall

A first course in programming, covering fundamental concepts and techniques. Although no programming experience is required, this course is *not* intended for persons with only casual interest in computers and programming. By the end of this course students will have had extensive hands-on programming experience and will be able to use the computer as a powerful problem solving tool. (MA 112 or permission.) Mr. Krupp

MA 201 Mathematical Analysis-III Fall, Spring

The calculus of functions of more than one variable. Introductory vector analysis, analytic geometry of three dimensions, partial differentiation, multiple integration and applications. (MA 113.) Staff

MA 202 Mathematical Analysis-IV Spring

Infinite series and an introduction to ordinary differential equations. Convergence of numerical series; Maclaurin and Taylor series; first and second order differential equations, linear differential equations with constant coefficients, applications. (MA 113 or MA 201.) Staff

[**MA 231 Data Structures and Programming**] Offered in 1976-77.

MA 301 Linear Algebra Fall

Topics from modern linear algebra including the algebra of matrices, determinants, rank and equivalence of matrices, linear dependence, systems of linear equations, vector spaces and linear transformations, characteristic values and vectors, orthogonal systems, canonical forms, dual spaces. (MA 113.) Mr. Peterson

MA 302 Abstract Algebra I Spring

An introduction to the study of groups, rings, fields. Algebraic structure; transformations and permutations; cosets and quotient groups; ideals; quotient rings; field characteristics. (MA 301 or permission.) Staff

[**MA 303 Abstract Algebra II**]

MA 310 Probability Fall

An introduction to the concepts of probability and their applications, covering both discrete and continuous random variables. Probability spaces, elementary combinatorial analysis, densities and distributions, conditional probabilities, independence, expectation, variance, Weak Law of Large Numbers and Central Limit Theorem. Numerous applications. (MA 201 is a corequisite, but students lacking this course should consult the instructor). Mr. Emerson

MA 311 Statistics Spring

An introduction to the mathematical methods of statistical inference. Topics will include: loss function, risk function, parametric and nonparametric problems, estimation, Baysian statistics, efficiency and the Neyman—Pearson Lemma. Classical tests within the normal theory such as F-test, t-test, and chi-square test will also be considered. Students preparing to take Statistics should note that a linear algebra background (MA 301) is helpful in using linear statistical models. There will be some emphasis on applications to problems of other disciplines. (MA 310.) Mr. Emerson

[**MA 315 Mathematical Models in the Social and Management Sciences**]

[**MA 318 Selected Topics in Operations Research**]

[**MA 321 Elementary Number Theory**]

MA 331 Numerical Analysis Spring

An introductory course stressing application rather than theory. Techniques of practical importance in the areas of linear algebra, roots of equations, interpolation, quadrature, and ordinary diffential equations will be covered. (Permission.) Mr. Krupp

MA 401 Advanced Calculus Fall

Further topics in the calculus and real analysis. Fundamental concepts of real function theory, divergence and curl, line integrals, Green's theorem, the Stieltjes integral, infinite series, power series, Fourier series, improper integrals. (MA 201 and MA 202.) Staff

MA 402 Advanced Calculus Spring

Further topics in the calculus and real analysis. A continuation of MA 401.
Staff

MA 411 Elementary Topology Fall

An introduction to the concepts of topology. Theory of sets, topology of the real line, continuous functions and homeomorphisms, compactness, connectedness, metric and function spaces, selected topics from the topology of Euclidean space. (MA 201 or permission.) Mr. Olinick

MA 421 Modern Geometry Spring

This course extends familiar Euclidean geometry in several directions. Non-metric properties are studied via convex bodies, the theorems of Helly and Radon and the isoperimetric problem. Projective geomerty is developed by extension of the Euclidean plane and finite projective planes studied from the suggested axiomatization. Duality and the classical theorems of Pappus and Desargues are discussed. Synthetic and algebraic methods are used throughout and dimensional generalizations are used throughout. Mr. Peterson

[**MA 431 Complex Analysis**]

MA 500 Advanced Study Fall, Spring

Individual study for qualified students in more advanced topics in algebra, number theory, real or complex analysis, topology. Particularly adapted for those who enter with advanced standing. (Permission.) Staff

MA 704 Problem Seminar Spring

Each student is required to complete problems designed to bring together the many facets of Mathematics investigated in the previous 3½ years. Each student presents orally at least two problems during the term. Required of mathematics majors. Staff

Music

The offerings of the Music Department focus on four areas of the discipline: 1) the vocabulary and theory of music, 2) its historical development, 3) music of ethnic cultures, 4) its creative aspects—performance, relation to other gestural arts (Dance), and composition.

The relative emphasis on these areas will vary for the individual major according to his or her talents, interest and needs. Independent study consists of advanced work in one or more of these areas as determined by the department in consultation with the student. It is generally assumed that the major will take MU 206 and 207 (Performance), MU 209 and 210 (Theory), MU 309 and 310 (Analysis), MU 280, Senior Work, and four other departmental offerings.

The four year curriculum for the student who intends to major in music with an emphasis in dance would include no more than eight dance courses, including senior work, and five academic curricular offerings in the music department to include 1 lower level literature course, 1 lower level ethnomusicology course, 2 semesters of upper level history or ethnic courses and MU 209 (Theory) or MU 301 (Electronic Music).

Any of these requirements may be waived or changed if the department feels the best interests of the student are served.

[**MU 101 Introduction to Music**]

[**MU 102 Perspectives in Music**]

MU 105 Survey of Music History Fall

Axiomatic to the approach taken in this course is the idea that music, while an independent art with its own laws, values and pleasures, is nevertheless a direct function of the aesthetics and values of the time and locale in which it is produced. The Survey of Music History is therefore not only a study of developing and changing musical styles and the men who created them, but a study of the impact on music of significant historical and philosophical movements. The history of music is viewed not as a succession of fixed events, but rather as a dynamic evolution of styles and genres which are conditioned by and conform to the spirit of the times. MU 105 will extend from the medieval period to 1750. Format will consist of three lectures and one discussion period per week. Mr Kurtzman

MU 106 Survey of Music History Spring

Continuation of MU 105. (106 may be taken without 105.) Staff

MU 110 World Folk Musics Fall

This course, designed as an introduction to the folk and traditional musics of cultures of the world, is oriented toward the non-music major who desires a broad overview. Focus will be upon musical examples, both filmed and recorded, which demonstrate to the student the nature of music, the aesthetic concepts associated with it, its uses and functions, and the range of styles and genres which are characteristic of the world's peoples. Previous musical training is not required since most of the music lives in the oral tradition of the cultures studied and is not generally notated. (Open to freshmen and sophomores; juniors and seniors by permission. Limited to 60.) Mr. Smith

MU 140 Introduction to Dance Fall

A comprehensive introduction to dance from the viewpoints of dancer, choreographer and audience. Three hours of technique classes, plus classes in basic

elements of composition, history and criticism. Students will have outside work to do in basic composition exercises, assigned readings on dance history and criticism, and short papers on the dances they have seen both in the films and in dance performances. The course, or its equivalent, will be the prerequisite for the other courses in dance technique, composition and history. Ms. Lister

[**MU 150 Dance Composition**]

[**MU 206 Performance**]

MU 207 Performance Spring

The focus of this study is the development of musical understanding and expression through active participation in making music. As a laboratory course, the primary work takes place in tutored private practice and ensemble rehearsal; choir, orchestra, chamber groups and individual instruments. Permission.

Mr. Fanning and Staff

MU 209 Theory Fall

As an introduction to the study of constructing and analyzing music, MU 209 approaches the basics of notation, sight reading, keyboard skills and ear training. Emphasis on exercises in interval studies, rhythm, simple melody and harmony dictation, clef reading skills and other materials necessary for theoretical work. Mr. Todd

MU 210 Theory Spring

Continuation of MU 209—four part harmonization through diminished seventh, augmented sixth and neopolitan chords. Last half of course will stress chromatic harmony and movement. Ear training labs and tapes: two weekly written assignments include composition of small gestures. Mr. Todd

MU 220 Mozart Opera Fall

A study of Mozart as opera composer with particular focus on the two late works: *Cosi Fan Tutte* and *Don Giovanni*. Course will investigate briefly the historical context in which these were written and then concentrate on the ingenious and varied musical means the composer uses to achieve his and his librettist Lorenzo da Ponte's dramatic ends. Ability to follow score is recommended.

Mr. Todd

[**MU 240 Aesthetics and Music**]

[**MU 250 The Dance Experience**]

[**MU 255 Words and Music**]

MU 260 Intermediate Dance Technique Fall

This course offers intermediate level work in both ballet and modern techniques. Emphasis will be placed on the shaping of dance phrases and developing an increased understanding of and control over movement. There will be films of various dance styles, and readings concerned with several different techniques. Permission. Ms. Lister

MU 261 Intermediate Dance Technique Spring

Continuation of MU 260.Permission. Ms. Lister

[**MU 265 Introduction to the Opera**]

[**MU 270 Artistic Development in the Individual Composer**]

MU 280 Introduction to Ethnomusicology Spring

The work will focus on the development of an understanding of the field of ethnomusicology in terms of its: a) orientation and terminology; b) representative literature and scholars; c) research methods and techniques; and d) fields of study (i.e., geographic areas, processes, and genres). The interdisciplinary nature of research in ethnomusicology also requires an exploration, to some degree, of collateral disciplines such as anthropology, sociology, and psychology. Some emphasis will also be placed on the development of each student's listening skills.

Mr. Smith

MU 301 Electronic Music Fall

The study and composition of musical structure using synthesized and concrete sound events generated in an electronic studio. Students are instructed in the use of the equipment, the means for collecting and manipulating sound, and in tape-mixing techniques. Goal of the course is finished tapes of pieces. Permission. 3 class hours and 2 lab. sessions per week. Mr. Todd

MU 309 Analysis Fall

The study of individual works and genres for advanced students. Analysis will be done through readings, score study and compositional exercises.

Mr. Fanning

MU 310 Analysis Spring

Continuation of MU 309. To be announced

MU 312 Composition Spring

This course will start with a series of short compositional exercises in motive, rhythm, harmony and contrapuntal movement using pieces from both the classical and contemporary literature as models. With these as a basis, the student will structure larger forms: songs, dances, pieces for solo instrument or for instrumental ensembles, and learn how to score them. Students should have had at least one semester of theory (or its equivalent) and have notational skills since all work will be put in score. Please consult instructor before registration.

Mr. Todd

MU 320 Duets: Choreographing and Partnering Spring

This course explores the possibilities in working with another dancer in creating a dance partnership in which both people choreograph and perform. We will examine the ways in which dancers relate to each other to form a duet which is not merely a solo for two people, but a dance in which the performers express a specific physical and/or emotional interdependency. Permission.

Ms. Lister

[**MU 325 Music in the 20th Century**]

[**MU 345 Folk and Traditional Music of Europe and Asia**]

MU 346 Folk and Traditional Music of Africa and the Americas Fall

This course will survey the folk and traditional musics of Africa and North and South America. For an in-depth knowledge of a culture's music one must view not only the product—that is, music sound—but also the range of "acceptable behavior" which is characteristic of audience, performer, and creator. Study will focus not only on the sound but on functions and uses of music in each culture and concepts within these cultures which deal with aesthetics, creation and performance. Recommended for music majors. Permission. Mr. Smith

MU 350 The Dramatic in Music Spring

"The Dramatic in Music" will examine those aspects of music where dynamic development is a primary aesthetic consideration. The nature of musical drama will be explored by close study of examples from relevant genres of composition, such as opera, the symphony, the concerto and the string quartet. Lecture-discussion sessions will seek to confront these works with fundamental questions about sound relationships and their movement through time with a view toward discovering those elements of style which contribute to our perception of such works as dramatic in character. Mr. Kurtzman

MU 360 Advanced Dance Technique Fall

In this course the dancer will continue with daily work in modern and ballet techniques supplemented by films, occasional improvisational work, and use of more sophisticated musical accompaniment. Emphasis will be on polishing and perfecting a sound dance technique. Several selections from the standard dance repertory will be taught. Permission. Ms. Lister

MU 361 Advanced Dance Technique Spring

Continuation of MU 360. Permission. Ms. Lister

[**MU 365 Seminar in Ethnomusicological Theory and Transcription**]

MU 380 Seminar in Music Literature Fall

Seminar in selected topics in the history of music literature. Class meetings will consist of student presentations of material relating to specific repertoires, composers, or genres. Topic for fall 1975: the Italian Madrigal of the Sixteenth and Early Seventeenth Centuries. Permission. Mr. Kurtzman

MU 405 Seminar in Ethnomusicology: Fieldwork Spring

This course is designed to acquaint the student with and develop his skills in the area of fieldwork. The collection, organization, and analysis of data collected by each student will form an important portion of the term's activities. Each student will develop skills in the formulation, organization, and subsequent realization of an actual field project. The content of reports may range from traditional songs, stories, dances, and fiddling to oral histories of families who have preserved musical traditions as part of their heritage. Literature which deals with theory, method and techniques of fieldwork, as well as representative field studies of other areas will also be used as a basic component of the classroom activity.

During the period of field activity, class hours will be flexible to allow for movement to and from the field-site.

Permission of instructor required as well as one previous course in ethnomusicology. Mr. Smith

MU 500 Independent Study.

Permission.

MU 704 Senior work.

Permission.

Performance Studies

The aim of the Department is to present music for its value as literature and as a record of one aspect of human achievement, not as professional training. We strongly encourage students to improve performing techniques as a necessary means of cultivating the art. The College will assist the student as far as possible in securing adequate instruction when not provided by the regular staff.

Students who wish private instruction in piano, organ, violin, viola, classical guitar, flute, recorder or voice should enroll with the Department before registration.

Fees are to be paid to the Cashier's office upon receipt of a bill at the beginning of each term. No rebate is allowed for lessons missed except in the case of continued illness. Performance studies consists of 1 lesson weekly; fee $105 per semester for all instruments except recorder which may be taught in consort. Fee for recorder consort is $65 per semester.

Private instruction in piano	Ms. Kurtzman Mr. Viviano
Private instruction in organ	Mr. Fanning
Private instruction in violin and viola	to be announced
Private instruction in classical guitar	Mr. Rhinelander
Private instruction in flute	Ms. Scoones
Private instruction in recorder	Mr. Skrobela
Private instruction in voice	Ms. Sliker

Music Library. The Christian A. Johnson music library contains several thousand records, scores, books, and a collection of chamber music. Listening facilities in the library are available to anyone from the college community.

Practice facilities. Practice rooms with pianos are available for individual and group rehearsal. Organs: Walcker (1969) mechanical action, 15 ranks; and Gress-Miles (1970) 48 ranks. Application should be made to the secretary of the music department.

College Orchestra. Weekly rehearsals leading to the performance of music from all periods. Performance by small ensembles is encouraged. All instrumentalists are urged to audition. Apply to secretary of music department.

Mr. Fanning and Mr. Smith

College Choir. The College Choir sings at chapel services and special concerts on and off campus. In keeping with the educational intent of the choral program, repertoire for all performing groups is as historically inclusive and demanding as possible. Performance in languages other than English is stressed. Audition required, open to all students without prerequisite. Mr. Fanning

Recitals. Regularly scheduled recitals and lectures are open to the public.

See also Division of Humanities.

Philosophy

Non-majors: Most Philosophy Department courses are open to students who are not majors and who have had little or no previous work in philosophy. HM 150, HM 160, and PA 170 are the general introductions to the field and are open to students in all classes. Courses in the 200 range are introductions to specialized areas of philosophical study which do not require particular competences, though students who have done work in education, religion or the arts will find their studies in those areas of assistance. Except as noted, 300 level courses are generally open to students but they suppose a higher level of sophistication than the 200 level courses and are not normally open to freshmen. 400 level courses are normally open only to majors. Non-majors with a previous background in philosophy may elect a 400 course but they should consult with the instructor.

Major program: Majors will elect ten courses in the department which may include HM 150 and HM 160. All majors must take PA 400 in their junior year. Cognate courses, particularly in the areas of political science and religion, may be substituted for two courses with prior permission. Majors must elect: one course in Ethics and Social Philosophy (PA 300-320); one course in Philosophy of Science and Theory of Knowledge (PA 350-370); one course in Studies in the History of Philosophy (PA 400-420) and the Senior Seminar (2 course units) in Contemporary Philosophy.

Honors candidates will do a 500 project in the Winter Term of Senior Year and may substitute under exceptional circumstances a second term of 500's work for the second term of the Senior Seminar. Students must have a B average in all work in the department during their junior year and first term of senior year to be permitted to undertake an Honors project. 500 projects are open only to philosophy majors and they must have attained an average of B in all course work within the department.

PA 115 Ancient Greek Philosophy Spring

The concentration will be on Plato and Aristotle, though some attention will be paid, as introduction, to the Pre-Socratics and, for contrast, to ancient atomism. Where possible, the course will try to relate the readings to current concerns, rather than treating them as museum pieces merely. Classes will be an informal mixture of lecture and discussion. (No prerequisite.) Mr. Bigelow

HM 150 Foundations of the Western Intellectual Traditions: Antiquity to the Reformation Fall

Through a study of philosophical and theological texts we shall attempt to comprehend the basic questions and methods of Western intellectual traditions. This course is not a comprehensive history of ideas, but a study of great works in their own context and in ours. Selections from Plato, *The Bible,* Epicurus, Anselm, Thomas Aquinas, Pico, Luther, Montaigne. Mr. Bates, Mr. Nuovo, Staff

HM 160 The Origins of Modern Thought: Science, Religion, Society Spring

The 17th, 18th and early 19th centuries constitute a period of profound intellectual change and of the greatest advance in scientific thought in Western History. This course will trace the development of philosophy, religion, and ethics under the impact of this change through the study of major works of authors such as Descartes, Hobbes, Spinoza, Hume, Kant, Mill. Mr. Bates, Mr. Nuovo, Staff

PA 170 Philosophical Problems Fall

An introduction to philosophy for the student who prefers a non-historical approach. Several problems of contemporary interest will be considered from

current and opposing points of view. Among possible topics would be: knowledge vs. scepticism, freedom and determinism, the relation of mind and body, religious belief, whether ethical judgments can be rationally justified. Juxtaposing different views on a given topic will, it is hoped, help the student on what is half the battle in philosophy—namely, seeing that there is a problem and what it is. Class discussion will be important. Reading used will be an anthology of selections, a text, or possibly both. Mr. Bigelow

[**PA 210 Philosophy of Education**]

PA 213 Philosophy of Religion Fall

An investigation of the philosophical problems raised by the claims of religious belief: the existence and attributes of God, divine omnipotence and human freedom, the problem of evil, immortality and eschatology. Mr. Nuovo

[**PA 218 Introduction to Modern Logic**]

[**PA 221 American Philosophy**]

PA 222 Introduction to Philosophy in America—The Classical Period Spring

An examination of some issues drawn from the American idealists—represented primarily by Royce—and the pragmatists—represented primarily by Dewey, Pierce, and James. We will be concerned, for example, with the impact of science on philosophy and society, the exhaustion of theology, the attempted domestication of strands of European philosophy, and the progressive estrangment of philosophy from the concerns not merely of the dominant surrounding culture, but from the highest moments of American literature as well.

(While it would be advantageous to have taken PA 221 (American Philosophy from Edwards to Thoreau), it is *not* a prerequisite of this course. Some preparation in American literature or intellectual history, or in philosophy, or permission of the instructor is required.) Mr. Gould

PA 223 An Introduction to Contemporary Philosophy Fall

This course will provide an introduction to two of the major movements in twentieth century philosophy—analytic philosophy represented by such figures as Russell, Moore, Ayer and Wittgenstein, and phenomenology and existentialism represented by Husserl, Heidegger and Sartre. The course will attempt to survey characteristic problems and methods, but, in addition, a major figure of each tradition will receive extended attention. Mr. Bates

PA 231 Philosophy of History Spring

An investigation of the two basic trends on the philosophy of history: critical and speculative. Readings from Eliade, Hegel and Toynbee will approach the problem of "the meaning of history." Contemporary readings from various authors will analyze the nature of historical knowledge in its relation to the natural sciences. Offered in alternate years. Mr. O'Brien

PA 233 Philosophy, Criticism, and the Arts Fall

An examination of the idea and the practice of criticism as a possible meeting ground for philosophy and several individual arts. Historically, we will focus on texts drawn from two critical periods: the turn of the eighteenth to the nineteenth century, and, roughly, the last fifteen years. Both of these are periods in which aesthetics was seen as a potentially central philosophic discipline. Students will be expected to produce some criticism of their own, primarily of poetry, but also of movies, or paintings, or prose works, where available and appropriate. Texts will include Kant's *Third Critique,* Wordsworth's *Prelude,* selections from Hume's *Essays,* Jonathan Edwards' *Treatise Concerning Religious Affections,* and

writings by contemporary philosophers like Richard Wollheim and Stanley Cavell. (Some experience in literature, or the arts, or philosophy is strongly recommended. Please see the instructor if you are in doubt about your preparation for this course.)
Mr. Gould

Ethics and Social Philosophy

Courses numbered in the range PA 300-320 fall in the general area of ethics, social philosophy and theory of value. Offerings may change from time to time and courses will be alternated as indicated.

[**PA 305 Human Nature and Ethics**]

PA 307 Twentieth Century Ethics Fall

This course will concentrate on problems of meaning, and justification, in ethics by tracing the development of twentieth century analytical ethics from the intuitionism of G. E. Moore and W. D. Ross, through the emotive theory of A. J. Ayer and C. L. Stevenson, the precriptivist theory of R. M. Hare, to the renewed naturalism of John Rawls. There will also be a discussion of existentialism and ethical theory.
Mr. Bates

[**PA 308 Justice**]

[**PA 309 Philosophy of Law**]

Philosophy of Science and Theory of Knowledge

Courses numbered in the range PA 350-370 fall in the general area of theory of knowledge or epistemology. Problems of knowledge, proof and perception have been particularly central to philosophical concerns in the modern period. Students considering graduate work in philosophy should elect courses in this area. Offerings may change from time to time and courses will be alternated as indicated.

PA 351 Theory of Knowledge Spring

Discussion of major questions concerning knowledge, such as: what is involved in claims to know; how and to what extent are these claims justified in different areas. Reading material: both contemporary and otherwise, but the focus of attention will be on the problems discussed, not on historical evolution of views. (At least one course in philosophy or permission.)
Mr. Bigelow

[**PA 352 Philosophy of Mind**]

[**PA 353 Philosophy of Science**]

PA 354 Philosophy of Language Spring

An examination of the crucial roles that language, and reflections on language, have played in philosophical investigations, past and present. Although the course is not primarily historical, a good deal of attention will be paid to the emergence of language as an explicit theme for philosophy in this century. It will be suggested that this emergence is part of what makes certain regions of contemporary philosophy distinctively modern.

Texts studied will include several of Plato's dialogues (e.g., the *Cratylus,* the *Theatetus,* or the *Sophist*), Rousseau's *Essay on the Origin of Language* and his *Discourse on Inequality,* Wittgenstein's *Philosophical Investigations,* and some contemporary writers. This course will involve the student's presentation of work to the class, as well as a final project. (Prerequisite: one course in philosophy or permission of the instructor.)
Mr. Gould

PA 356 Philosophy of Social Science Spring

This course will begin by considering some characterizations of the nature and structure of the natural sciences. Then, there will be an exploration of the general question of whether a social science (or, a science of human behavior), which has the same structure and power as a natural science, is possible. Both positive and negative answers to this question will be examined, and in this examination certain fundamental concepts of human action will be explored which have special relevance for psychology and sociology. The course will conclude with a look at some more specific philosophical problems of particular social sciences. Mr. Bates

Studies in the History of Philosophy

Courses numbered in the range PA 400-420 cover major figures in philosophy or major movements, e.g., empiricism, rationalism, idealism, existentialism. These courses are recommended to students planning to pursue graduate work in philosophy and should normally be elected only by students who have had previous courses in philosophy.

PA 400 Reading in History of Modern Philosophy Fall

A reading course for junior majors covering the major philosophical movements of the last 100 years: idealism, existentialism, positivism, linguistic analysis. Occasional discussion meetings and final written and/or oral examination. (Open only to philosophy majors. Required of all majors.) Staff

[**PA 403 British Empiricists**]

[**PA 404 Descartes and Spinoza**]

[**PA 406 Kant**]

PA 408 Hegel and the Nineteenth Century Fall

An intensive reading of the *Phenomenology of Mind*. Use will be made of the commentaries of Kojeve and Hyppolite and there will be an examination of the post-Hegelian movements of right and left. Mr. O'Brien

[**PA 412 Philosophy in the Middle Ages**]

PA 500 Research in Philosophy (open only to majors) Fall, Spring
Staff

PA 704 Senior Seminar: Contemporary Philosophy Fall, Spring

All seniors elect two terms of the senior seminar. The seminar is devoted to the study of contemporary figures or movements in philosophy. Students will prepare periodic research papers utilizing primary sources and journal literature. Staff

See also Division of Humanities

Physical Education and Athletics

The Physical Education Program concentrates on the so-called life-time sports so that all students leave Middlebury with exposure to sports or recreational activities in which they have developed a degree of skill and interest which will be an asset to them in later years. *The program consists of a pool test (or a course in beginning swimming) and five seasons in essentially life-time sports.* There is a credit maximum of three seasons for participation in intercollegiates, performing groups, or instructional team sports. The department schedules two seasons in each of the two college terms and one season in the college winter term.

Students may complete their Physical Education Program by utilizing any of the following options and opportunities:

a. Instructional course program.
b. Approved Independent programs
c. Exemption program
d. Any combination of the above, including a credit maximum of three seasons for participation in intercollegiates, performing groups or instructional team sports.

The pool test or one beginning swimming course is required of all students. The test consists of jumping into the deep end of the pool and staying afloat for five minutes without assistance of any kind. Any method (floating, treading, swimming, survival floating) may be used. Beginners and those uncertain of their ability to pass this test should register for an instructional course in swimming. Current American Red Cross Senior Life Saving or Water Safety Instructor cards (show cards at the Field House office) are accepted in lieu of the pool test.

The Physical Education Program may be completed at any time or by any of the above options convenient to the student during his/her four years at Middlebury—except that three exemptions or three seasons credit should be attained by the end of the Junior year to ensure completion of the program. Exemption tests will not be given to seniors in their senior year. *The entire program may be completed by demonstrating strong competency at or above the intermediate level in three life-time activities offered in the exemption program, provided the pool test has also been passed.* The passing of one or two exemptions provides the student with one or two seasons credit toward completion of the entire program. Students may take no more than three instructional courses in the same activity nor receive more than three seasons credit for the same activity (one of which may be an exemption credit).

All registrations for instructional classes in physical education are held in the Field House office, and registrations are held prior to the start of each of the five seasons during the college year. There are three exemption periods during the year (early fall, middle winter, and late spring) and students should sign up for test appointments at the Field House office prior to the announced exemption periods. Students should consult the appropriate department member concerning participation in intercollegiates and performing groups. Application forms for independent programs are available at the office in the Field House and are returnable, for consideration, to Prof. Colman's office one week prior to the start of each physical education registration period. Students who wish to elect courses (i.e., the student does not need the course for physical education credit) should register with the department for the appropriate season and they will be secheduled for classes on a space available basis.

Physical Education Program (Fall, Winter I, Winter Program Term, Winter II, and Spring Seasons)

Specific seasonal course offerings are available at the time of registration prior to the start of each season. Staff

Physical Education Instructional Course Registration Periods: (9:00-12:00 and 1:00-4:00 at the Field House office)

REGISTRATION DATES	SEASON	SEASON DATES
September 8, 9, 10	Fall	September 15-October 25
October 7, 8, 9	Winter I	October 27-December 6
December 1, 2, 3	Winter Program Term	January 7-February 6
February 16, 17, 18	Winter II	February 23-April 3
March 22, 23, 24	Spring	April 12-May 15

EXEMPTION PERIODS AND TESTS: Advance sign-ups for test appointments are recommended and requested. Please sign-up at the Field House office from 9-12:00 or1-4:00 unless otherwise stated. Note key below.

Fall Tests (September 8, 9, 10) — Sign-up dates are September 4, 5, and 8: Bowling, Dance*, Golf, Karate*, Riding*, Sailing, Swimming, Tennis, and Pool Tests.

Winter Tests (February 16, 17, 18) — Sign-up dates are January 27, 28, 29 and February 16: Badminton, Dance*, Figure Skating, Ice Skating, Karate*, Riding*, Skiing, Swimming, Squash, Touring, and Pool Tests.

Spring Tests (May 17, 18, 19) — Sign-up dates are May 10, 11, and 12: Archery, Badminton, Bowling, Canoeing, Dance*, Golf, Karate*, Riding*, Squash, Swimming, Tennis, and Pool Tests.

* Tests by appointment only.
Note: Test Fees are: Bowling $.80; Karate $1.50; Riding $2.00.

Physics

The course offerings in the Department of Physics are designed to fill the needs of a liberal arts curriculum. The offerings are suitable for three categories of students: (1) those who do not intend to specialize in science, but have an interest in science; (2) those who desire a basic introduction to physics as an adjunct to a major in another science; and (3) those who major in physics. Students normally major in physics as preparation for graduate study in the sciences or engineering, as preparation for a professional school, or as preparation for teaching. Students planning to major in physics should start no later than their sophomore year and preferably in their freshman year.

Students intending to major in physics (category (3) above) will find that the department offers a full complement of both theoretical and experimental courses. *The minimum requirements for a major in physics* are the four-term sequence of Mathematical Analysis, PH 109, 110, 210, five electives in physics, and a senior program. The senior program consists of either a three-unit thesis and general examination, or two terms of advanced laboratory and examination. Students doing practice teaching under the Teacher Education Program may, with permission, take only two units of senior thesis. Specific courses to be taken by a major are determined in consultation with a department adviser. The depart-

ment offers a program for majors of Environmental Studies with Emphasis in Physics. (See Environmental Studies.)

Courses in the numbering sequence PH 111 and PH 199 are designed for students not majoring in the natural sciences and so do not count toward satisfying the physics major.

There are three Fall-Spring courses in electronics being offered this year; PH 145 Electronics for the Intimidated, PH 190 Computer Electronics, and PH 221 Electronics for Scientists. The first mentioned is for students who are *not* majoring in any of the natural sciences but who have a curiosity about the omnipresent electronic systems that surround and influence them in their everyday life. The second named course is directed toward those students who have an interest in how computers work. By computers we mean everything from the microcomputers that will exist in the cars of the future to control such operations as fuel consumption and braking to hand held calculators to our own PDP 11/45. The course is definitely *not* one on computer programming. Finally the last mentioned course is for students in the natural sciences, and is intended to introduce them to the electronic instruments they will be using in their careers as practicing scientists.

PH 109 Mechanics and Waves Fall

Mechanics: Both Newtonian and Einsteinian mechanics will be covered in the course. The concepts of work, energy, momentum and the conservation principles of mechanics are presented using the calculus. Particular attention is paid to systems exhibiting periodic or near-periodic motion.

Waves: Waves in elastic media are studied. Topics include travelling waves, standing waves and Fourier synthesis.

The computer is used throughout the course both in problem solving and in the analysis of laboratory experiments. (MA 112.) Three hours lect., three hours lab. Mr. Gould

PH 110 Electricity and Magnetism Spring

The classical laws of electricity and magnetism are presented. Topics include electric potential, current, resistance, capacitance, inductance and electric circuits both DC and AC. In the laboratory electronic instruments such as the oscilloscope are introduced and utilized. (PH 109.) Three hours lect., three hours lab. Mr. Gould

PH 145 Electronics for the Intimidated Fall

This self-contained introduction to electricity and electronics is intended for non-science majors who are mystified by electronics and want not to be. As such, it is *not* open to majors in the natural sciences. Using only high school algebra and simple trigonometry, the students will study the behavior of DC and AC electrical circuits. Next, the manner in which solid state diodes and transistors are used to control and modify electrical signals will be considered. This, in turn, will lead to an examination of common circuit configurations such as power supplies, amplifiers, oscillators, and radio detector circuits. The course will conclude with an overview of the manner in which these "building blocks" are used in complete electronic systems such as TV's, radios, and hifi's. The labs will involve the construction and testing of these important "building block" circuits. Three hours lect., three hours lab. Mr. Cooney

PH 155 An Introduction to the Universe Fall

A general course in astronomy designed primarily for students not majoring in the physical sciences. Emphasis is given to the properties of the universe and the methods through which astronomers investigate it. Topics to be discussed include the sun, stars, our Galaxy, external galaxies, cosmology, observational instruments, and the solar system. Laboratory work includes use of

the college observatory. (No prerequisites.) Three hours lect.; lab. to be arranged.
Mr. Winkler and Mr. Terwilliger

PH 190 Computer Electronics Spring

A lab-based, self-paced introduction to the operation and use of digital integrated circuits with examples related to the 'hardware" of digital computers as well as current commercial applications. (No prerequisites.) One or two lectures and two self scheduled lab. sessions. Mr. Terwilliger

PH 210 Introductory Quantum Physics Spring

The course opens with an examination of the early evidence for and theories of the quantized behavior of microscopic systems, including the kinetic theory of matter and the first observation of the discrete nature of charge, mass, and energy. Next, the wave mechanics is introduced and the implications of this theory, such as the uncertainty principle, are discussed. The course concludes with an overview of the wide range of applications of this theory to atoms, molecules, atomic nuclei, solids, and elementary particles. Three hours lect. and three hours lab. (MA 201 or MA 202, PH 109-110.) Mr. Cooney

PH 221 Electronics for Scientists Fall

A one semester introduction to modern electronic circuits and solid state devices with emphasis on their physical operation and practical use. Discrete devices, such as transistors, and (analog) integrated circuits, such as operational amplifiers, are equally stressed. Examples are from common experience as well as scientific measurements. (PH 110 or permission.) Three hours lect. and two short lab. sessions. Mr. Terwilliger

PH 266 Contemporary Astronomy and Astrophysics Spring

An introduction to the physics of the Galaxy and the universe as determined through observations at radio, infrared, optical, ultraviolet, and X-ray wavelengths. Topics include the structure and evolution of stars, pulsars, neutron stars, black holes, X-ray sources, supernovae, galaxies, quasars, and the expanding universe. (Prerequisite: PH 109 or permission. This course is not normally open to students who have completed PH 155.) Three hours lect.; lab. to be arranged.
Mr. Winkler

PH 301 Electromagnetic Fields Fall

A study of the properties of electric and magnetic fields in empty space and in matter, leading to the unified and concise description of all electromagnetic phenomena by Maxwell's equations. Topics include electrostatics, magnetostatics, dielectric and magnetic materials, scalar and vector potentials, and electromagnetic induction. Emphasis is on local, differential relationships and consistency with the principles of relativity. Applications are made to problems of current interest in physics and other sciences. (PH 110 and MA 201.) Three hours lect. Mr. Cooney

PH 302 Electromagnetic Waves Spring

The theory of Maxwell is used as the basis for an electrodynamic description of the behavior of light. Models for the propagation of waves in space and matter serve as the basis for an understanding of common phenomena in optics and communication. The theory is further illustrated through laboratory experience with lasers and microwaves.

The Fourier transform is introduced as a tool for treating problems of bandwidth, dispersion and wavefront reconstruction (holography). (PH 301.) Three hours lect., one lab./problem session. Staff

PH 303 Intermediate Mechanics Fall

The mechanics of particles is extended through the use of generalized coordinates to provide equations of motion for complex mechanical systems. The resultant formalism stresses energy rather than force and allows considerable freedom in the choice of variables used to describe the motion. The method is illustrated by theories for planetary orbits, gyroscopes, coupled oscillators, deformable solids and fluids. (Prerequisite PH 109, corequisite MA 201.) Three hours lect.
Mr. Gould

PH 312 Methods of Theoretical Physics Spring

The course concentrates on the methods of applied mathematics and the special functions which are commonly used in theoretical work. Topics include matrices, eigenvalue problems, complete sets of functions, complex variables, integral transforms, the use of Green's functions and the calculus of variations. Problems will be drawn from several branches of the physical sciences. Three hours lect. (PH 110 and MA 201.)
Staff

PH 401 Introduction to Quantum Mechanics Fall

A fundamental course in quantum mechanics aimed at understanding the mathematical structure of the theory and its application to physical phenomena at the atomic and nuclear levels. Topics include the basic postulates of quantum mechanics, operator formalism, Schroedinger equation, one-dimensional and central potentials, angular momentum and spin, perturbation theory, and systems of identical particles. (PH 210, MA 201, MA 202.) Seminar—three hours. Mr. Winkler

PH 402 Topics in Modern Physics Spring

In-depth study of two or three topics of current interest drawn from the areas of atomic, nuclear, solid state, and elementary particle physics. (PH 401 or permission.) Three hours lect.
Staff

PH 441 Advanced Laboratory I Fall

During the semester the student will complete two laboratory projects. Each will be supervised by an individual faculty member and will involve exploration of basic experimental research techniques in an area of current interest. For each project the student will be expected to do some library research and background reading, to participate in the design of the experiments and to present a written report on the project. (PH 210.)
Staff

PH 442 Advanced Laboratory II Spring

This course is a continuation of PH 441 above.
Staff

PH 500 Research and Special Topics (Permission.) Fall, Spring
Staff

PH 705 Independent Study and General Examination Fall, Winter, Spring

Independent study in the fall, winter and spring terms culminating in a written thesis. Accompanied by comprehensive examinations in February. (Three credits total.)
Staff

Political Science

Political Science defines, describes, explains, and evaluates political phenomena. It does so with a number of disciplines or habits including science, philosophy, history, and prudence. Following a first course in which historically important philosophic definitions of and judgments about the subject are examined, the curriculum continues with a number of courses which introduce the study of particular sub-fields of the subject. Intermediate level courses are offered in the major areas of the subject, and the department offers a methods course useful to students of the sub-fields. The senior program involves intensive seminar work. The curriculum as a whole is designed to meet the demands of thoughtful citizenship, to depict in use a number of the elements of the liberal arts and sciences, and to prepare those students who intend to pursue further work in either graduate or professionl schools.

Required for the major in Political Science: A total of ten Political Science courses, including: (1) PS 101, (2) completion of the Senior Program, and (3) two courses in each of three of the following fields: American Political Institutions, International Politics and Foreign Policy, Comparative Politics, and Political Theory. All fall and spring Political Science courses count toward field distribution. Majors should also consult with their advisers regarding appropriate cognate courses.

Senior Program: The Senior Program normally consists of two Seminars, each of which includes advanced work appropriate to the sub-field in which the seminar is offered. The Seminars are listed as the 400 level courses below. Before taking PS 404, 405, or 406 students are strongly advised to take PS 331. The Seminars may be taken at any time beginning with the Spring Term of the major's Junior year, but they must be taken during separate terms. Two course credits are granted for the Senior Program. Students admitted to the Honors Program may substitute one term of Honors work for one of the Seminars. Departmental approval also may be granted to Seniors with exceptional records who wish to substitute an Independent Project (PS 500) for one of the Seminars. Proposals for these projects should be submitted to the Department for approval before the Senior term in which the project would be undertaken.

Honors Program: Students may become candidates for Honors in Political Science at any time after the beginning of the Spring term of the Junior year and prior to the Spring term of the Senior year. Honors projects will normally be begun in the Senior Seminars or 500 projects. Prior to the term in which Honors are sought, the Department will determine whether the Senior Seminar or 500 projects are progressing satisfactorily enough to be continued as Honors projects. One course credit (PS 500) is granted for Honors work.

PS 101 Introduction to Political Science Fall

A study of the classics in political science: Plato, *Republic;* Aristotle, *Politics;* Machiavelli, *The Prince;* Hobbes, *Leviathan;* Locke, *Second Treatise on Government;* Rousseau, *Second Discourse;* Marx, *Communist Manifesto* et al; Weber, "Politics as a Vocation," "Science as a Vocation"; Nietzsche, *The Use and Abuse of History*. Two lectures and one discussion section per week. (Freshmen and sophomores or permission.) Mr. Dry and Staff

PS 102 The American Political Regime Spring

Our examination of this "first new nation" begins with the Constitutional Convention and the framers' deliberations over the best form of government consistent with the principles of the Declaration of Independence and appropriate to the people of the United States of America. Study of this and later critical moments

in the interpretation and construction of the American political regime requires an examination of the writings of *The Federalist,* Jefferson, Marshall, Calhoun, Tocqueville, Lincoln, and Frederick Douglass. Next, selected basic problems in American politics are examined by means of Supreme Court cases and critical essays. Topics have included race, civil disobedience, moral basis of international action, and higher education. Mr. Dry

PS 103 Introduction to Comparative Politics Spring

The course is designed to provide: (1) an introduction to the major concepts and methods employed in the study of comparative politics, and (2) detailed case studies of the major characteristics of contemporary "democratic," "authoritarian," and "modernizing" political systems, including Britain, France, the USSR and China. The course is intended for freshmen and sophomores, and would be useful to those planning to study abroad. Mr. Rosenberg

PS 104 Introduction to American Political Processes Fall

The course will include brief exploration of the workings of formal governing institutions (Congress, the Courts, the Presidency) and the policy problems they deal with (defense, the economy, foreign relations, ethnic differences, poverty); and more extensive examination of extra-governmental processes such as voting, parties, interest groups, mass movements, and elite influence. Mr. Dickson

American Political Institutions

PS 203 American Politics and Legislation Fall

The American political process; the theory and practice of politics; the functions and activities of political parties and interest groups and their role in the initiation and control of governmental policies, including a consideration of crucial political issues and practical politics. (PS 102 or 104.) Mr. Thurber

PS 204 American Politics and Legislation Spring

The formal and informal aspects of legislative organization and procedure; a study of political power as found in the legislative process and in the activities of the power groups in American society. Closely related to current legislative proceedings. (PS 102 or 104.) Mr. Thurber

PS 301 State and Local Government Spring

Institution, structure, and political process at the state and local level. Contemporary issues and problems facing state and local government in the American political system. (PS 102 or 104.) Mr. Thurber

PS 303 Public Administration Spring

The questions considered in this course include, what is administration in general; is administration a science or an art and can it be taught or learned; what kinds of studies are most profitably applied to it; what is public administration in particular; what is bureaucracy and what, if any, are the alternatives to it; what are the appropriate criteria for the appraisal of administrative acts, for example, rationality, justice, efficiency, glory, loyalty. Readings by a variety of writers including Publius, Woodrow Wilson, Frederick Winslow Taylor, Edward C. Banfield, J. R. Lucas, Robert Maynard Hutchins, Chester Barnard and Max Weber. Mr. Nelson

[**PS 305 Constitutional Law: Principles and Structure**] Offered in 1976-77.

PS 306 Constitutional Law: Individual Rights Fall

This course is primarily a study of the judicial interpretation of the Constitution's Bill of Rights. Three distinct constitutional subjects are covered: the First Amendment freedoms of speech, press, assembly and religion; the rights of the accused, as protected by Amendments Four through Eight; and the relationship between the reach of the Fourteenth Amendment's Due Process clause, which restricts the power of state government, and the original Bill of Rights, which limits the federal government. Consideration will also be given to philosophical explanations of the nature of individual rights and their relationship to both the obligations of citizenship and the powers of representative government. A Mock Court exercise is anticipated. (Juniors and seniors with PS 102, or permission.) Mr. Dry

PS 307 The American Presidency Fall

Powers, purpose, and functioning of the Presidency in the American political system. (PS 102 or 104.) Mr. Thurber

PS 309 Urban Politics Spring

One major political problem is investigated in detail, such as school desegregation, with a broader focus on the politics of race and education. A systematic framework of urban political analysis is then applied to explore the social context and political structure of the city and of urban political movements. Mr. Dickson

[**PS 402 Seminar in Constitutional Law**] Offered in 1976-77.

PS 403 Seminar in Policy Analysis Spring

Application of several alternative models of policy analysis such as cost-benefit, computer simulation, and models of organizational behavior, to selected urban and national policy problems such as housing, welfare, energy and the environment. (Permission.) Mr. Dickson

[**PS 406 Seminar on American Electoral Behavior**]

Comparative Politics

[**PS 323 Politics of Mainland Southeast Asia: Old Societies and New States**] Offered in 1976-77.

PS 324 Politics of Island Southeast Asia: The Politics of National Integration Fall

An analysis of the transformation of traditional cultures into modernizing regimes. Two case studies in the politics of developing areas will be examined in depth: (1) the struggle for national integration in Indonesia, and (2) martial law in the Philippines. Mr. Rosenberg

PS 404 Seminar in Comparative Politics Spring

Global strategists used to divide the world into two camps: the Free World and the Communist Bloc. Increasingly, this distinction is being blurred. Capitalists are doing business with communists and a Third World of newly independent nations has come into being. A new alignment is emerging between the rich and poor nations. All nations face the problem of managing their increasing interdependence. Somewhere in the middle of this process is the newly-emergent political entity known as the European Community. During the post-WWII period while the USSR and the USA were locked in a Cold War nuclear stalemate, European nations were undergoing a number of radical social and economic changes, constituting

a movement toward a "New Europe." The seminar will examine these trends towards re-alignment and interdependence through a series of simulations. Members of the seminar will select roles to represent (e.g., the French Foreign Minister, the U. S. Secretary of State, the Saudi Arabian Oil Minister) and attempt to reach agreement on the major issues now confronting the European Community. (PS 103, 331 or permission.) Mr. Rosenberg

International Relations and Foreign Policy

PS 201 International Politics Fall

An introduction to the study of international politics. The material covered includes the formulation of foreign policy, inter-nation behavior, the nature of the international system, and possible causes of international conflict. Mr. Leng

PS 202 Contemporary International Politics Spring

Four or five major contemporary international problems are considered in conjunction with conceptual models and theories of social scientists attempting to explain them. Topics considered in recent terms have included: the future of the East-West detente, Sino-Soviet relations, the political impact of multi-national corporations, the Middle East conflict and relations between rich nations and poor nations. (PS 201.) Mr. Leng

PS 302 International Conflict Resolution Spring

An investigation of international law, international organization, diplomacy, and the findings of peace research as approaches to the resolution of conflicts among nations. Students are assigned position papers and participate in debates on the utility of different approaches considered in the course. (PS 201 is helpful, but not required.) Mr. Leng

PS 311 American Foreign Policy Fall

Major assumptions and objectives of American foreign policy since 1945. Analysis of historical performance (Cold War, Vietnam) and emerging problems in Asia, Europe, and the Middle East. Mr. Dickson

PS 405 Seminar on the Causes of War Fall

A research seminar on the causes of international war. There are two parts to the course: readings and discussion of the theories and findings of social scientists and other students of human and international conflict, and individual research papers. The research papers are designed to construct and test a partial theory of international conflict. The course is open to students who have taken PS 201, including non-majors. PS 331 is recommended, but not required. (PS 201 or permission.) Mr. Leng

Political Theory

PS 317 Political Philosophy: Classical Political Philosophy Fall

Consideration of Greek and medieval political philosophy. Emphasis on the themes of natural right, the claims of political association and private life, action and theory, and the agenda or scope and character of political philosophy.

Mr. Nelson

PS 318 Political Philosophy: Modern Political Philosophy Spring

Close study of important political philosophies. Themes include the transition from natural right to natural rights, the revolt against classical political philosophy, the rejection of the theoretical life as the best way of life, substitution of various activist views of human being for the classical notion of man, and the emergence of human studies independent of and allegedly superior to political philosophy. Mr. Nelson

PS 331 Theory and Method of Empirical Political Analysis Fall

This course is primarily intended for social science majors who are interested in (1) gaining a basic understanding of the major approaches to the study of politics, and (2) acquiring the necessary skills, techniques and practice in analyzing political phenomena. The course is strongly recommended to juniors before they take PS 404, PS 405, or PS 406. Mr. Rosenberg

[**PS 333 20th Century Political Thought**] Offered in 1976-77.

PS 401 Seminar on Representative Government Spring

This course will examine the principles of representative government, as articulated by philosophers writing as founders of that form of government (such as Machiavelli, Hobbes, and Montesquieu); the origins of representative government in England, France, and America; and the development and preservation of representative government in America. We will study the issue of political change by choice (founding) versus chance (evolution); the nature and significance of political parties; the organization of government; and the task of statesmanship. (Junior and senior majors or permission.) Mr. Dry

PS 409 Seminar in Political Philosophy Fall

Study of a writer, a theme, or an era important in political philosophy. The seminar in Fall 1975 will be about (a) Hobbes, (b) history and political philosophy, or (c) some modern conservatives, the choice between these to be made after consultation with members of the seminar. (Permission.) Mr. Nelson

Independent Projects

PS 500 Advanced Projects

A program of independent work designed to meet the individual needs of advanced students. (Permission.) Staff

Psychology

For the student who majors in psychology engagement with experimental data lays the basis for an empirically founded and objective formulation of principles of human behavior. He or she may encounter the data in published research reports, in regular laboratory work, and in connection with individual research along lines that he or she finds important. The relevant observations may involve human subjects or sometimes infra-human subjects for the better experimental control that they may permit. Whatever the sources of the observations, the student comes to see them as products of the experiments that generated them, and thus evaluates their importance for hypothesis or generalization.

As a psychology major the student takes a program of elective and required courses in psychology and related disciplines. By the end of sophomore year, through work in Psychology, and in cognate fields, the student has acquired familiarity with many of the data, concepts, and research procedures essential to an understanding of human behavior. During the last two years the student makes use of accumulated knowledge and skills in his or her deep involvement with several areas of central importance to psychology.

Students generally choose to complete as much as possible of their formal course work toward the major by the end of the junior year so that their work in psychology as seniors can be devoted to independent reading and study, and possibly to individual research leading to Departmental Honors.

Major in Psychology: Required for a major: PY 105, PY 201, PY 207, PY 301, PY 306, and at least four additional fall or spring term courses in psychology; Qualification in Psychology; the General Examination in Psychology (PY 705); and completion of cognate requirements: two one-term courses, chosen in light of the student's interest and with the consent of the Psychology Department, from among the courses offered in Biology, Chemistry, Mathematics, and/or Physics.

Joint Major in Biology and Psychology: Required for a major: Biology BI 110, BI 314, BI 316 and three electives in Biology; Psychology PY 105, PY 201, PY 207, PY 301, PY 306, PY 705; three electives chosen with advisers' approval from the courses in Chemistry, Mathematics, Physics, or Economics EC 210.

Joint Major in Psychology and Sociology: Required for a major: Psychology PY 105, PY 201, PY 208, PY 306, PY 705, and two electives in Psychology; Sociology SA 102, SA 205, SA 301, SA 352, SA 700 (2 terms), and one elective in Sociology.

Qualification in Psychology must ordinarily be accomplished by the end of the student's sophomore year and is achieved by completion of Psychology PY 105 with a grade of at least C–, by completion of Psychology PY 201 with a grade of at least C–, and by completion of the extra-departmental cognate requirements stated above. A student who has not met Qualification by the end of sophomore year may be granted exception to the requirements on action of the Department in response to a written request.

Winter Programs: No winter programs in Psychology are required of either psychology majors or joint majors in biology and psychology. However, the winter program in Instrumentation for the Behavioral Sciences, given in alternate years, is highly recommended for those students who may want to conduct senior research leading to possible Honors in the major. Completion of this winter program may in some cases be deemed a prerequisite to approval of such an individual senior research program.

Senior Program: Preparation for the General Examination (PY 705), given yearly in May, will involve independent reading by the student. This preparation may be done as the equivalent of one course during the fall or winter or spring term of the student's senior year at his or her choice.

Students who seek to be graduated with *Departmental Honors in Psychology* must apply to the Department before February 1 of the junior year. They will then register for Advanced Research (PY 500) during the spring term of junior year to delimit their problems and conduct any necessary pilot or feasibility studies for their research. Upon successful conclusion of such studies they will, if they choose, be admitted to Honors candidacy, and continue research during senior year. They may also, if they choose, devote the winter term of senior year to research. Upon successful completion of their project an Honors Examining Board will be convened to consider and make recommendation about the order of departmental Honors to be awarded upon their graduation. These orders include Honors, High Honors, and Highest Honors in Psychology.

PY 105 Psychology: A Viewpoint Fall, Spring

Several important issues selected from the problems of perception, motivation, and mental illness are considered from the point of view that, for a psychologist, a satisfactory understanding of the phenomena he studies will necessarily depend on his seeing them in terms of his subject's (1) physical capabilities and limitations, (2) experiential environment, and (3) interactions with that environment. (Open to Freshmen; Sophomores and upperclassmen require permission.)
Staff

PY 201 Principles of Research in Behavioral Science Spring

This course introduces the student to behavioral experimentation through a consideration of the problems relating to the design and analysis of experiments. It deals, further, with the accepted procedures for describing and reporting the outcomes of such research. (PY 105, or permission.) Mr. Ewell

PY 207 Conditioning and Learning Fall

This course introduces the laboratory experiments and the theories relating to the major phenomena of conditioning and learning. The work of such men as Pavlov and Skinner is considered in this context. The topics include classical conditioning as signal learning, discriminative control, operant training procedures, scheduling of reinforcement, and aversive control. These topics serve as the basis for an analysis of complex behavior and behavior modification techniques in natural settings. Laboratory work centers on operant training with the laboratory rat. (PY 105.) 3 hrs. lect., lab. Mr. Prouty

PY 208 Memory and Conceptual Processes Spring

This course deals with some of the problems of human memory and thinking: how information is coded, how it is stored, how stored information is retrieved, and how stored information may be used in dealing with new situations. The course touches on traditional verbal learning studies, contemporary models of memory processes, concept learning, thinking, and some aspects of language. (PY 105.) 3 hrs. lect., lab. The laboratory deals entirely with human learning and retention. Mr. Prouty

PY 216 Drugs and Behavior Spring

An examination of the classes of drugs which affect central nervous system function and behavior with reference to their possible sites of action. Both the patterns of use of various drugs and the user characteristics will be investigated for alcohol, nicotine, stimulants and depressants, tranquilizers, hallucinogens, and opiates. (PY 105 or permission.) Mr. Woodruff

PY 225 Child Psychology Spring

The purpose is to describe the major stages of child development in our society and to examine the principles and implications derived from this description.

The course will consider such topics as: the nature of the developmental process, the gene-behavior pathway, perceptual-motor development, the growth of cognitive skills, language development, the emergence of personality and the child in school. (PY 105.) (This course will receive Teacher Education credit.) Mr. Prouty

PY 226 Psychology in Clinical and Educational Contexts Spring

This course deals with the procedures used by psychologists in evaluating intelligence, personality, and other psychological variables as they appear in human subjects. Emphasis is given to procedures of psychological interviewing and testing. (PY 105.) (This course will receive Teacher Education credit.) Mr. Ewell

[**PY 227 Abnormal Psychology**] Offered in 1976-77.

PY 301 Physiological Psychology Fall

The central focus is on the neurophysiological, neuroanatomical and endocrinological substrates of both human and animal behavior. In the laboratory the student will learn several of the surgical and anatomical techniques used to investigate central nervous system function. (PY 105 *or* permission. Permission will be liberally granted to students with backgrounds in biology, chemistry or physics.) 3 hrs. lect., lab. Mr. Woodruff

PY 306 Sensation and Attitude: The Quantification of Mind Fall

In this course psychological measurement and scaling are considered in the context of the psychophysics of sensation and the social psychology of attitude. The close conceptual and methodological interrelationships between the two fields of inquiry are stressed. (PY 201.) 3 hrs. lect., lab. Mr. Ewell

[**PY 314 Experimental Psychology: Sensory Processes and Perception**] Offered in 1976-77.

PY 316 Research in Physiological Psychology Spring

This course deals with advanced procedures of physiological psychology, including surgical, neuroanatomical, and histological procedures. (PY 301.) 1 hr. lect., 5 hrs. lab. Staff

PY 411 Contemporary and Continuing Issues in Psychology Fall

This course will focus on the major conceptual frameworks that define contemporary psychology: Skinner's radical behaviorism, the humanistic psychology of Maslow and Jourard, Laing's existential-phenomenological approach, and the structuralism of Piaget. These will be examined for their present and future usefulness as paradigms. An attempt will be made to see psychology both as a science and as an human endeavor. (Permission. Permission will be liberally granted to Juniors and Seniors.) Mr. Prouty

PY 426 Personality and Psychotherapy Fall

This seminar course deals with the formulations of various psychoanalytic schools with respect to personality and the procedures of therapy. (PY 227 and permission.) Mr. Ewell

PY 500 Advanced Research Fall, Spring

A program of research arranged to meet the needs of advanced students majoring in psychology. (Permission.) Staff

PY 705 General Examination in Psychology

Senior psychology majors are expected to work independently throughout the year in preparation for the General Examination given in May. This examination covers the field of psychology rather than specific course material. Each student is granted one course equivalent for preparation for this examination. He may take that equivalent, at his own choice, during the fall, winter, or spring term of senior year. Staff

Religion

Courses in religion are designed to acquaint students with the many aspects of religious life in a variety of cultural settings, and with the chief methods employed in investigating and interpreting religious phenomena.

Major Program: A major in religion must satisfactorily complete three introductory courses, four 300 level courses, two *cognate* courses, and senior work. A *cognate* course is a course offered by another department whose content or method is pertinent to the study of religion: courses in anthropology, art history, history, literature, philosophy, and sociology. In every case a cognate course must be approved by a student's adviser before it can be credited toward the major. The senior work requirement may be satisfied either by completing RE 702 or by writing an honors thesis.

Departmental Honors: Students who have maintained a B average in departmental courses may elect at the end of their junior year to become candidates for departmental honors. During the fall semester of senior year an honors candidate shall enroll in an RE 500 course and do preliminary research on a chosen topic under the direction of a faculty member. Following the satisfactory completion of this course and with the recommendation of the faculty member the student shall prepare a thesis during the winter and spring terms (the thesis will count as two course credits). "Honors" shall be awarded to candidates who receive a B+ as their thesis grade; "High Honors," to those who receive an A–; "Highest Honors" to those who receive an A or A+; in each case candidates must maintain a B average in their departmental courses.

Introductory Courses

The following courses are open to all students without prerequisite or permission. HM 150 and HM 160 are offered as a general introduction to religion and philosophy.

HM 150 Foundations of the Western Intellectual Traditions: Antiquity to the Reformation Fall

Through a study of philosophical and theological texts we shall attempt to comprehend the basic questions and methods of Western intellectual traditions. This course is not a comprehensive history of ideas, but a study of great works in their own context and in ours. Selections from Plato, *The Bible,* Epicurus, Anselm, Thomas Aquinas, Pico, Luther, Montaigne. Mr. Bates, Mr. Nuovo, Staff

HM 160 The Origins of Modern Thought: Science, Religion, Society Spring

The 17th, 18th and early 19th centuries constitute a period of profound intellectual change and of the greatest advance in scientific thought in Western History. This course will trace the development of philosophy, religion, and ethics under the impact of this change through the study of major works of authors such as Descartes, Hobbes, Spinoza, Hume, Kant, Mill. Mr. Bates, Mr. Nuovo, Staff

RE 201 The Old Testament Fall

The history, literature, and faith of the Hebrew people from the Patriarchical age to the Maccabean revolt. Attention will be given to the methods of historico-literary criticism and the contribution of archeology to biblical history and interpretation. Mr. Scott

RE 202 The New Testament Spring

The history, literature, and faith of first century Christians as reflected in the New Testament. Attention will be given to various critical methods used in biblical scholarship. Mr. Scott

RE 203 The Idea of the Religious Quest in the West Spring

This course studies western religion as a quest for liberation from evil and realization of some supreme good or ideal, and it explores the way in which the idea of this quest is developed in various Greek, Hebrew, and Christian traditions. Readings in Plato, the Old and New Testaments, the Stoics, Plotinus, Augustine, Luther and others. Mr. Rockefeller

RE 204 The Jewish and Christian Traditions Fall

A course designed as an introduction to the development of the Judaeo-Christian tradition. Attention will be given to the early conflicts between Jew and Christian, the formation of church structure (e.g., creeds and sacraments), the rise of anti-semitism, the divisions within Christianity and Judaism, and some adjustments these groups made to social and intellectual change in the nineteenth and twentieth centuries. Mr. Ferm

RE 206 Hinduism and Buddhism Spring

An historical introduction to the Hindu and Buddhist traditions. The political and social background will be taken into account as well as the ritual context of each tradition; the primary focus, however, will be on the literature and the various modes of thought and expression of the major schools of Buddhism and Hinduism. Attention will also be paid to the development and transformation of Buddhism beyond India, in particular in China and Tibet. Mr. Nuovo

RE 220 The Shaping of American Religious Life Spring

A study of the historical sources of the western religious traditions and their expression in the social and intellectual context of American history. Particular attention will be given to Puritanism in America, the impact of westward expansion, and the influence of social and intellectual change in the late nineteenth and twentieth centuries. Mr. Ferm

PA 213 Philosophy of Religion Fall

An investigation of the philosophical problems raised by the claims of religious belief: the existence and attributes of God, divine omnipotence and human freedom, the problem of evil, immortality and eschatology. Mr. Nuovo

Studies in Religion

The following courses are limited in enrollment and are offered with prerequisites or by permission.

RE 301 Modern Views of God and Religious Man: the 19th Century Fall

Studies in the writings of such figures as Schleiermacher, Hegel, Feuerbach, Kierkegaard, Dostoevsky, and Tolstoy. (Permission.) Mr. Rockefeller

RE 302 Modern Views of God and Religious Man: the 20th Century Spring
Studies in the writings of such figures as Martin Buber, John Dewey, Paul Tillich, Reinhold Niebuhr, and Walter Stace. (Permission.) Mr. Rockefeller

RE 303 Theories of Religion Fall
An examination of modern theories of the origin and nature of religion with special attention given to phenomenological and sociological theories. The course will begin with a brief survey of the history of the study of religion as background for a closer study of the work of major theorists: Durkheim, Weber, Evans-Pritchard, Otto, Van Der Leeuw, Eliade. (Permission.) Mr. Nuovo

[**RE 305 Studies in the Philosophy of Religion**] To be offered in 1976-77.

RE 306 Puritanism and Revivalism in America Fall
Reading and discussion of original documents from Puritans and Revivalists, including John Winthrop, Jonathan Edwards, Charles G. Finney, and Billy Sunday. (Permission.) Mr. Ferm

RE 308 Seminar in American Religious History Spring
Topic for 1975-76: American religious life in the late 19th and early 20th centuries. Special attention will be given to urban and industrial change, the reaction to new intellectual issues (e.g., in the evolution controversy and in biblical criticism) and the effect of the Great Depression. (Permission.) Mr. Ferm

RE 310 Seminar in Biblical Theology Spring
Topic to be announced. Mr. Scott

[**RE 311 Psychology of Religion**] To be offered in 1976-77.

RE 312 Zen Buddhism and Mysticism Fall
The course will explore the history of Zen in China, Japan and America, inquire into the nature of the religious experience involved in Zen, and compare the Zen experience to that of representative western mystics. Mr. Rockefeller

[**RE 314 Philosophy and Theology during the Middle Ages and the Reformation**] To be offered in 1976-77.

The following courses, offered in other departments, may be credited toward the religion major as 300 level courses:

HI 328 The Reformation Mr. Tillinghast

SA 380 Religion, Myth and Ritual Symbolism Mr. McCreery

RE 500 Independent Research Staff

RE 700 Senior Research for Honors candidates Staff

RE 702 Senior Seminar Spring
Staff

See also Division of Humanities.

Russian

The following courses taught in English by the Department of Russian are open, with permission of the instructor, to majors in other departments: RU 251 and RU 252, Russian Literature and Culture; RU 351, Dostoevsky; RU 352, Tolstoy.

Formal admission to the major program is attained through satisfactory grades in RU 202 and RU 252 or through satisfactory scores on a qualifying examination. The qualifying examination will cover all language skills and a general knowledge of Russian literature and culture from its beginnings to the present.

Prospective majors are strongly urged to take an intensive Russian course during the winter term following RU 201.

Normally a *major program* will consist of the following courses: RU 301, RU 302, RU 315, RU 321 and two courses chosen from the following: RU 311, RU 312, RU 313, RU 314, RU 401, RU 402. Although all students will be expected to take work in the areas of language, literature, and civilization and culture, the program of an individual student may place greater emphasis on any of these three areas and each student's program will be planned individually in consultation with the chairman.

The *Senior program* will consist of a Senior Seminar taken during the spring semester of senior year. Students with particularly strong records will be encouraged to prepare an Honors project under the supervision of a faculty member. Upon the approval of the chairman Honors work may be substituted for the Senior Seminar.

Students majoring in Russian should plan on having a second strong field of concentration. Students planning to teach should have a second language, preferably through at least the third year of study. Students planning careers in government, finance, commerce, etc., are strongly advised to have strong concentrations in one of the following fields: Economics, Geography, History, or Political Science. A joint or double major with one of these areas of study makes a particularly strong program.

Middlebury is one of the institutions sponsoring a semester-long program of Russian study at Leningrad State University through the Council on International Educational Exchange. Competition for this program is extremely rigorous and students should begin planning their entire undergraduate study program early if they anticipate applying. Interested students should consult with the chairman as early as possible concerning this program.

RU 101 Beginner's Russian Fall

Four-skills approach to provide a firm control of the sound system and the structure of Russian. Although much emphasis is put on the spoken colloquial language, reading, writing and a conscious understanding of the fundamentals of grammar provide a firm foundation for work in advanced courses or for reading in specialized fields. Five class meetings per week (two lecture sections, three drill sections) and intensive use of the language laboratory. Mr. Baker and Staff

RU 102 Beginner's Russian Spring

Continuation of the approach used in RU 101, but with increased emphasis on reading. (RU 101 or equivalent.) Five class meetings per week (two lectures, three drill sections) and intensive use of the language laboratory.

Mr. Baker and Staff

RU 201 Intermediate Russian Fall

Systematic review of grammar and development of the spoken and written skills attained in Beginner's Russian. Four class meetings per week (one lecture, three drill sections). (RU 102 or equivalent.) Mr. Baker and Staff

RU 202 Intermediate Russian Spring

Continuation of approach used in RU 201. Reading of contemporary Russian texts, conversation and written assignments in Russian based on reading assignments. (RU 201 or equivalent.) Four class meetings per week (one lecture, three drill sections). Mr. Baker and Staff

RU 251 Russian Literature and Culture (in English) Fall

A survey of Russian cultural history and literature from its beginnings to 1880. The main emphasis will be on the 19th century. No knowledge of Russian is required. (Permission.) Staff

RU 252 Russian Literature and Culture (in English) Spring

Continuation of survey of Russian cultural history and literature, beginning with 1880. The main emphasis will be on the literature and culture of Soviet Russia. No knowledge of Russian is required. (Permission.) Mr. Orth

RU 301 Russian Phonetics, Diction and Conversation Fall

Systematic review of the fundamentals of Russian grammar. Stress will be put on correct pronunciation and intonation and on the development of oral fluency and freedom of self-expression in speech and in writing. Intensive use of language laboratory. (RU 202 or equivalent.) Mrs. Baker

RU 302 Russian Conversation and Composition Spring

Continuation of development of oral and written fluency and correctness. (RU 301 or equivalent.) Mrs. Baker

[**RU 311 Russian Masterpieces of the 19th Century**] Offered in 1976-77.

[**RU 312 Russian Masterpieces of the 19th Century**] Offered in 1976-77.

RU 313 Russian Masterpieces of the 20th Century Fall

Study in the original of some of the major twentieth-century writers. Classroom discussion and written assignments in Russian. (RU 202 or permission.) Staff

RU 314 Russian Poetry Spring

Study in the original of Russian poetry from the 18th century to the present day. Classroom discussion and written assignments in Russian. (RU 202 or permission.) Staff

RU 315 Introduction to Russian Literary Readings Fall

An encounter with representative Russian writers and their works, combining textual analysis with a study of literary techniques. Classroom discussions, oral and written reports. Conducted in Russian. (RU 202 or equivalent.) Mr. Orth

RU 321 Soviet Man and his World Spring

Readings in both Russian and English on Russian and Soviet culture and civilization. Classroom discussions, oral and written reports. (RU 202 or equivalent.) Mr. Baker

RU 351 Dostoevsky (in English) Fall

A study of the major works of one of the masters of Russian literature, who has had a great influence on world literature, particularly on the Existentialists. No knowledge of Russian is required. (Permission.) Staff

RU 352 Tolstoy (in English) Spring

A study of the major works of one of the giants of Russian and world literature. No knowledge of Russian is required. (Permission.) Staff

RU 401 Advanced Language Study Fall

Continued development of spoken and written skills, including stylistic analysis of various types of material. (RU 302 or equivalent.) Staff

RU 402 Advanced Language Study Spring

Continued development of spoken and written skills, including stylistic analysis of various types of material. (RU 401 or equivalent.) Staff

RU 500 Advanced Studies in Language and Literature Fall, Spring

Supervised individual study for highly qualified students; including Honors Thesis. Staff

RU 704 Senior Seminar Spring

A consideration of selected works from Russian literature and intellectual history. Written reports and individual oral presentations in Russian. (Senior majors.) Staff

See also Division of Foreign Languages.

Sociology-Anthropology

Our world is characterized by rapid social change and complex social problems. At the same time, one is increasingly aware of the impact of social relationships in producing social structures and cultural values that either inhibit or facilitate desired goals.

The major in Sociology-Anthropology is designed to provide the student with a perspective for the systematic analysis and understanding of human behavior resulting from cultural and societal forces. Based on the empirical findings of the closely related disciplines of Sociology and Anthropology, this perspective is inherently comparative, such that the department is concerned with the inter-relations between culture and society in various settings. Although both of these disciplines share common concern about human behavior, each in addition has its own history, concepts and theoretical commitments. Anthropology essentially focuses on the role of culture in human experience and Sociology is concerned primarily with the role of social interaction and the social structure in human experience.

Upon completion of the introductory courses (SA 101 and 102), each major may declare a "specialization" in either Anthropology or Sociology. (This does not preclude the election of courses in both fields; in fact, we strongly urge our majors to select courses from both disciplines.) The "concentrator" in Anthropology must take one "culture area" course; the "concentrator" in Sociology must take SA 205, Sociological Theory.

All majors, regardless of specialization, must take SA 301, The Research Process. It is strongly suggested that students take this course in the junior year in order to prepare the topic and background for their Senior (or Honors) Thesis. Sophomores may register for the course if they wish, but especially if they plan a junior year abroad.

During the final year, the student will write a Senior Thesis (or Honors Thesis). Normally the two thesis units are used in the fall and winter terms. However, at the student's option, both units may be taken during the fall term, with the final copy due at the end of the fall term.

Required for the major in Sociology-Anthropology: SA 101, SA 102, SA 301, either SA 205 or one "area course," the Senior thesis, plus a minimum of 5 but not more than 9 fall and spring courses in the Department and a minimum of one but not more than two winter courses in the Department (one of which may be part of the Senior Thesis). The selection of cognate courses will be planned with the major's adviser, taking into consideration the student's aims and purposes in the department.

Departmental Honors will be granted to those who do superior work on the senior thesis and course work in the department.

Introductory Courses

SA 101 Introduction to Anthropology Fall

An introduction to the major sub-fields of anthropology—physical anthropology, archaeology, linguistics and social anthropology. An examination of evolution and contemporary variation in man and culture, using data from human paleontology and biology, the archaeological record and ethnographic studies.

Mr. Andrews, Mr. McCreery

SA 102 Sociological Perspectives Spring

A systematic introduction to the science of societal structures and processes. Major varieties of sociological thought are explored in terms of theoretical constructs, methodologies and substantive findings. After coming to understand the primary ways by which the sociologist perceives and deals with any given social phenomena, specific substantive materials dealing with a common theme will be examined in depth. Mr. Haerle, Mrs. Nelson, Mr. Nye

Theory and Method

SA 205 Sociological Theory Fall

A critical analysis of the major sociological theorists who have influenced contemporary American sociology, through the use of original sources. Emphasis will be given to Marx, Weber, and Durkheim, along with some more contemporary writers. Implications of their ideas for contemporary theory and research. (SA 101 and SA 102 or permission.) Mr. Haerle

SA 301 The Research Process Spring

Introduction to the relationship of concepts, hypotheses and theory. By means of a class research project, each student will be exposed to all phases of the research process, including research design, measurement, selected techniques (observation, participant-observation, interviews, questionnaires), statistical reasoning and testing, data analysis, and report formats. Submission of the Senior Thesis proposal. Lectures and research laboratory. Strongly recommended for juniors. (SA 101 and SA 102.) Mr. Haerle

Social Organization and Comparative Institutions

SA 315 Sociology of Education Fall

An examination of education as both a social institution and social process. Topics include the relationship of education to socialization, the social psychology of learning, the relation of educational institutions to other social structures, the influence of culture on moral education, the bearing which factors such as family background, sex and ethnicity have on the quality and content of the schooling process, the relation of various methods and types of education to the surrounding environment and the actual and potential role of education as an agent for social change. The substantive focus is on American society. (SA 101, 102 or permission.) Mr. Nye

SA 340 Sociology of Organizations Fall

A study of organizations and the principles that govern organizational life. The development, structure and dynamics of organizations including studies of prisons, schools, labor unions and corporations. Extensive consideration of control and authority, organizational change and conflict, and the impact of technology. The organizational environment of the individual and the social environment of the organization. (SA 101 or permission.) Mrs. Nelson

SA 345 Work, Leisure and Sport Spring

Major focus on work as a social and organizational phenomenon from two complementary points of view: (1) the sociology of occupations and professions, stressing careers, the process of professionalization, and autonomy vs. bureaucratic structure; and (2) industrial sociology, with emphasis on alienation and the conflict of formal and informal structures. Implications of change in the meaning and organization of work for problems of leisure and sport. (SA 102 or permission.) Mr. Haerle

[SA 364 Population Studies]

[SA 370 Social Inequality in Comparative Perspective]

SA 380 Religion, Myth and Ritual Symbolism Spring

An introduction to the role of religion, myth, and ritual symbols in culture and society. Why are symbols authoritative and powerful in some circumstances and not in others? What is the role of religious specialists, shamans, spirit-mediums, magicians, gurus, priests and prophets in social and cultural organization? These are the questions around which the course will be organized. This year case material will deal primarily with North American Indians. (SA 101 or permission.) Mr. McCreery

SA 385 Medical Sociology Spring

An introduction to the social organization of modern medical institutions such as hospitals, clinics and rehabilitation agencies. Problems of communication and role relationships among professionals and between patients and medical personnel. The impact of structures and role relationships on the quality and quantity of medical care and on the use of resources will be examined. Analysis of the sick role and the impact of illness. An exploration of man's social activities—economic, residential, familial—in relation to his health. (SA 101 or permission.) Mrs. Nelson

SA 390 Sociology of Sex Roles Fall

An examination of the sex roles traditionally assigned men and women in America and other cultures and an analysis of those areas of the social structure that affect the construction of sex roles, that create an impetus for change or for maintaining the current definition of the sexes. The legal position and education of women in comparison with men, differing employment opportunities, the division of labor in the family, sex stereotypes in the various media and the self-image of the sexes will be considered. (No prerequisites.) Mrs. Nelson

[SA 392 The Family]

[SA 393 Kinship, Marriage and Politics: Fundamentals of Social Anthropology]

Area Studies

SA 321 Native Peoples of North America Fall

An examination of the aboriginal cultures of North America from the Eskimo in the Arctic to the Aztecs of Mexico and the Maya of Guatemala. The major emphasis is on the conditions of various groups at the time of contact, with special concern for the theoretical and conceptual implications of the data. Some attention will be given to the prehistory and contemporary situation of various groups. Mr. Andrews

SA 326 Latin American Culture and Society Spring

An examination of the features that characterize the Latin American cultural area as seen from the anthropological perspective. Although historical data will be considered, the main emphasis is on contemporary Latin America. Particular attention will be paid to urbanization, sub-cultures, social stratification and value orientations. (No prerequisites.) Mr. Andrews

[SA 332 Peoples and Cultures of Africa]

SA 335 Chinese Society and Culture Spring

This course will be a survey of the principal institutions and ideas which form the background to late imperial and modern Chinese history. It will deal primarily with Chinese families, local communities, and social classes emphasizing the interaction of their economic, political, and religious aspects and changes in them during and after the Communist revolution. Readings for the course will include works of fiction and biography as well as social scientific analysis. (No prerequisites.) Mr. McCreery

SA 336 Japanese Society and Culture Fall

The study of Japan is necessarily the study of social change, since Japan has been a developing nation for about as long as the U.S.A. After an introduction to traditional forms of Japanese social organization the course will focus on Japanese responses to the problems of a rapidly changing, modern industrial state—changing patterns of family organization, the organization of work, racism, pollution, new religions. The reading will be a mix of social scientific analysis by Japanese as well as Western scholars and contemporary Japanese fiction. (No prerequisites.) Mr. McCreery

SA 343 American Community Studies Fall

An examination of selected communities and subcommunities within the framework of the folk-urban continuum. The structure of social class, status and power, and the relationship among institutions within the community. Assessment of methodological issues. (SA 101, SA 102 or permission.) Does not satisfy anthropology area course requirement. Mr. Haerle

Social Process and Social Problems

SA 352 Social Psychology Fall

A course in the general area of social psychology emphasizing the methodological and theoretical approach known as symbolic interactionism. Specific topics include the role of language in socialization and cognition, the formation, varieties and alternation of sociocultural identity, the influence of social groups and other cultural configurations on the individual person's thought and behavior, and consideration of problems associated with the heredity vs. environment controversy. The substantive focus is on selfhood in American society but some cross cultural and historical materials are utilized. (SA 101 or 102.) Mr. Nye

SA 356 Socio-Cultural Change Spring

An examination of socio-cultural change with emphasis on cultural evolution, acculturation and the development process, using data primarily from non-Western peoples. (SA 101, 102 or permission.) Mr. Andrews

[**SA 359 Peasant Society and Culture**]

[**SA 366 Majority-Minority Relations**]

SA 388 Deviance Spring

An examination of social deviance from what is termed the interactionist perspective. Major divisions of study include the social construction, maintenance and regulation of deviance, deviant subcultures and deviant identity. The substantive focus is on contemporary American society. (SA 101 or 102.) Mr. Nye

SA 495 Seminar in Sociology-Anthropology Spring

Offered periodically to allow study of a specific area or subject in Sociology or Anthropology. Topic varies from year to year. (Limited to juniors and seniors.) Staff

SA 500 Advanced Individual Study Fall, Spring

Open to qualified students, by permission. Staff

SA 700 Senior Thesis Fall, Winter

Under the guidance of a faculty member, each senior major will carry out an independent research project, often based on original data. Data must be analyzed and presented in a written report. Due at the end of the Winter Term. (The two course units may be taken during the fall semester; if so, due at the end of the Fall Term.) Staff

Spanish and Italian

Spanish

In its program of studies in Spanish the Department is committed to the twofold aim of developing in its students a full command of the language as well as a mastery of a body of knowledge reflecting the rich contribution of the Hispanic peoples to the world's literature and culture. The early courses concentrate on the rapid and thorough development of the fundamental language skills in preparation for the more advanced courses in language, literature, and culture and civilization. Integrated with the Department's offerings is the Middlebury Program for Juniors in Madrid and the Middlebury Summer Language School of Spanish, including intensive courses at the beginning and intermediate level. Non-majors are encouraged to take advantage of this opportunity to widen their educational horizons by studying in the context of another cultural milieu. In the case of majors, it is the Department's expectation that they will spend at least one semester in residence in Madrid.

The major consists of a minimum of eleven courses, including the following three required courses: 1) SI 301; 2) SI 302 or SI 303; and 3) SI 700. No more than two courses at the 100- or 200- level may be counted towards the major. Upon completing SI 700 (normally to be taken in the Fall Semester of the student's final year), the student may be nominated as an Honors Candidate and invited to participate in SI 705, the Seniors Honors Seminar. The Department will award Honors, High Honors and Highest Honors on the basis of the student's special project completed in SI 705 and his previous work in the Department.

Majors are encouraged to supplement their program by selecting, in consultation with the Department, courses from related areas outside their major. For graduation in Spanish, a student will be expected to have a thorough command of the language, to be conversant with the major currents of Hispanic literature, and to have a broad knowledge of Hispanic culture gained through the experience of courses at Middlebury, and study abroad.

SI 101 Intensive Beginning Spanish Winter

Designed to meet the needs of beginners who want to master, within a very short time, the basic structures and vocabulary of the language. Its basic commitment is to an ordered presentation of all four of the basic language skills: understanding the spoken word, speaking, reading and writing. The unifying factor, however, will be the spoken language, which students will be expected to use exclusively during the course hours. Two approaches to the learning of language skills will be used: one stressing the underlying grammatical patterns of language, and the other, language in its situational context. Classes meet daily for two sessions of approximately one hour and a half each, with types of materials alternated to provide for exposure to the two approaches mentioned. The student's daily course commitment will extend from eight to twelve in the morning plus lunch, which will be taken at Spanish tables with the instructors. (Followed by SI 102.) Staff

Note: In the past this course has normally been given during the Fall Term, but it is now given instead on an intensive basis during the Winter Term.

SI 102 Continuing Spanish Spring

For students who have successfully completed SI 101 in the Winter Term, the course emphasizes the control of basic language skills which are then used in reading and discussing short works by modern Spanish and Spanish American authors. (Normally followed by SI 219.) Staff

SI 201 Intermediate Spanish Fall

A course for freshmen and upperclassmen who wish to improve their control of basic language skills. A comprehensive review of grammar is followed by reading and writing exercises based on selected short works by modern Spanish and Spanish American authors. (Followed by SI 202.)

Mr. Ilgen, Mr. Véguez, Ms. Griswold

SI 202 Intermediate Spanish (Second Semester) Spring

This course is a continuation of SI 201. Its aim is to give the student a more advanced control of the language through further work in grammar, writing and conversation. Texts will include an advanced grammar and a contemporary Spanish-American novel. (Followed by SI 219.) Ms. Griswold

SI 219 Writing in Spanish Fall

A middle course in composition for students seeking to perfect their command of written Spanish. The course will consist of weekly written assignments on a variety of topics chosen to increase the student's control of the structures and vocabulary of the language. The course will also include a thorough review of grammar at a fairly advanced level. (Regularly followed by SI 220.)

Ms. Griswold, Mr. Véguez

SI 220 Spanish Conversation Spring

An intermediate course designed to perfect the student's fluency in spoken Spanish through a carefully structured program leading gradually into free conversation on topics of broad general interest. The course is based on a variety of materials, including articles from current Spanish and Spanish American magazines, film strips and other media. (Regularly followed by SI 300.)

Ms. Griswold, Mr. Peel

SI 300 Modern Writers of the Spanish World: An Introduction to the Study of Hispanic Literature Fall

An advanced language and literature course designed both to further the student's experience of Spanish and Spanish American literature and to perfect skills in literary analysis and critical writing. The work will be based on the reading of a number of outstanding works in prose and poetry. Prose readings will be from the short fiction of such established contemporary figures of Spanish America as Borges, Cortázar, Rulfo, Donoso, and García Márquez. Poetry readings will be taken from the works of equally representative figures in modern Spain: Jiménez, Machado, Lorca and Otero. Frequent short critical essays will complement the reading and provide the student with practice in writing. Open to qualified freshmen and upperclassmen. (Followed by SI 301.) Mr. Ilgen, Mr. Peel

SI 301 The Hispanic Tradition in Literature: From the Middle Ages to the Golden Age Fall

An introduction to the masterworks of Spanish literature from its inception to the period of its greatest flowering in the 16th and 17th centuries. Reading will include the great medieval epic of the Cid; the traditional ballads or *romances;* representative selections from both the *Don Quijote* and its celebrated precursor, *La Celestina;* the works of the classical Spanish poets of the Renaissance and Baroque (Garcilaso, Fray Luis de León, San Juan de la Cruz, Lope de Vega and Góngora); the first picaresque novel, the *Lazarillo de Tormes;* and *Fuenteovejuna,* a play by Lope de Vega, the prince of the Spanish stage in its greatest period.

Mr. Ilgen

SI 302 The Hispanic Tradition in Literature: From the 18th Century to the Present Spring

A reading of representative major works of the period, including the poetry of Bécquer, Darío, Machado and García Lorca, and the prose and drama of such figures as Larra *(Artículos de costumbre),* Zorrilla *(Don Juan Tenorio),* Bécquer *(Rimas y leyendas),* Unamuno *(San Manuel Bueno, Mártir),* Valle-Inclán *(Sonata de otoño),* García Lorca *(La casa de Bernarda Alba),* Ortega y Gasset *(La deshumanización del arte),* and Cela *(La familia de Pascual Duarte).*

Mr. Véguez

SI 303 The Hispanic Tradition in Literature: Spanish American letters from the 19th century to the present. Fall

The development of Spanish American letters from the early 19th century movements of Independence from Spain to the literature of the present. The works of Sarmiento, Martí, Darío, Mistral, Vallejo, Barrios, Paz, Neruda, Asturias and others will be studied with particular consideration given to their search for a Spanish American identity. Mr. Véguez

SI 315 El Arte de la Traduccion: Problemas y Soluciones Fall

A practical approach to the techniques of Spanish/English translation. A series of texts (prose and poetry) in both languages will be used as an introduction to the translator's art—and its problems. These texts will also be chosen specifically to allow for concentration on crucial areas of advanced Spanish grammar and stylistics, and points of contrast between the two languages, which must be mastered by the accomplished translator. Such diverse problems as proverbs, jokes, and the idiosyncratic jargons of journalism, politics, and the arts will also be examined. Certain attention will be devoted to language and translation theory. The course will include a final major project in translation. (Prerequisite: consent of the instructors.) Mr. Véguez and Ms. Griswold

SI 320 Introduction to Spanish Culture and Civilization Fall

The course will study important aspects of the development of Spanish culture from ancient times to the present. Representative readings from the works of pertinent writers will be supplemented by related cultural material on slides, tapes, and records. Open to qualified freshmen and upperclassmen. Ms. Maura

[SI 328 La Guerra Civil Española en la Literatura]

SI 330 Aspects of Spanish American Culture Spring

The course will study important aspects of the development of Spanish American culture from pre-Columbian times to the present. Representative readings from the works of pertinent writers will be supplemented by related cultural material on slides, tapes, and records. Mr. Véguez

[SI 337 Literatura y revolución]

[SI 340 The Literature of the Spanish Speaking World (In English)]

[SI 349 Contemporary Latin American Fiction (In English)]

[SI 401 Trayectorias de la narrativa española hasta Cervantes]

[SI 402 Cervantes y el *Don Quijote*]

[SI 408 The Modern Spanish Novel: The Realist Novel]

[SI 409 La novela española actual]

SI 417 El cuento hispanoamericano: Realidad y fantasía Fall

Many of the leading writers of fiction in Latin America have chosen the short story as their narrative form. They offer different interpretations of the world around them, ranging from the hostile environment of Quiroga's Argentina or Rulfo's Mexico to the fantastic visions of Borges' or Cortázar's literary games. Selections from many authors will give a broad view of the 19th and 20th century stories, to be followed by more detailed study of two or three contemporary writers. Mr. Peel

[SI 418 The Modern Spanish American Novel]

[SI 419 La novela hispanoamericana actual]

SI 424 Spanish Poetry of the Twentieth Century Fall

A study of the major poets of Spain from the Generation of '98 through the post-Civil War period: Unamuno, Machado, Juan Ramón Jiménez, García Lorca, Aleixandre, Alberti, Otero, Celaya and others. Emphasis is given to the problems of interpretation and the relationship between ideas and poetic structure. Ms. Maura

[SI 431 La comedia española del Siglo de Oro]

[SI 438 El teatro moderno en Hispanoamérica]

SI 440 & SI 445 Seminars:

Seminars are offered in a wide range of topics, varying from year to year. They include the following: *La literatura de la España medieval; Hispanoamérica: época colonial; Romanticismo, realismo y naturalismo en España; El teatro moderno en España; La poesía hispanoamericana del siglo XX; La poesía de Pablo Neruda; Federico García Lorca; Readings in the History of the Spanish Language; The Structure of Modern Spanish.* The department encourages suggestions from students for other topics, and will attempt to arrange seminars for which there is sufficient interest. Plans must be made no later than the beginning of the preceding fall or spring term.

SI 500 Independent Study Fall, Spring

The department will consider requests by qualified juniors and seniors to engage in independent work.

SI 700 Senior Research Seminar Fall

For senior majors. Advanced readings in Hispanic literature and the history of Hispanic culture. Through the study of key texts in criticism and history, the course will seek to provide a conceptual framework for the student's previous experience and course work in Spanish. Staff

SI 705 Senior Honors Seminar Spring

For candidates for Departmental Honors. Prerequisite: SI 700 and nomination by the Department. A broad topic of Hispanic studies will provide the framework and basic readings for this course. Topics will vary from year to year, and will deal with such themes as: (1) The Spanish Renaissance; (2) The Idea of America; (3) Romanticism and Revolution; (4) Heroes and Antiheroes; (5) *Modernismo* and the Generation of 1898.

The student will define a special project as a sub-topic of the general course theme, and will prepare, under the direction of a member of the Department, a paper of substantial length (30-40 pages). Each student will conduct a formal seminar on the subject to which his paper is directed. Not required for the major. Staff

Italian

The major in Italian Literature and Civilization consists of three parts: courses taken on campus during the regular academic year, courses taken at the Italian Summer School, and the Junior Year program of study in Florence. Candidates must complete SI 252 or a higher level course by the end of sophomore year. It is recommended that they take courses, offered on campus, in such related fields at Art, History and Music. They will be expected to attend the Italian Summer School during the sophomore-junior summer. During Junior Year in Florence they will enroll in four courses: a course in Stylistics and one literature course (both commissioned specifically for Middlebury College), and two courses at the University of Florence, in such areas as literature, linguistics, art, and music.

SI 151 Beginners' Italian Fall

Training in pronunciation; vocabulary building; a study of the fundamentals of grammar and syntax; pattern drills; readings. Laboratory exercises are an integral part of the course. Five class meetings per week (two in lecture sections, three in drill sections). Staff

SI 152 Beginners' Italian Spring

A review and application of the basic principles presented during the first semester. Readings, compositions, reports, laboratory assignments. Five class meetings per week (two lectures, three drill sections). Staff

SI 251 Intermediate Italian Fall

A thorough review of the structure of the language, combined with the reading of selections from contemporary Italian prose. Composition, oral reports. Staff

SI 252 Advanced Italian Spring

Reading of works by modern and contemporary Italian authors. Discussions, compositions. Staff

SI 351 Introduction to Literature Fall

The aim is to acquaint the student, through classroom discussions and oral reports on representative works, with the principal currents and authors of Italian literature. The first semester will be devoted to the study of the development of Italian literature from the Sicilian school to the Renaissance. Staff

SI 352 Introduction to Literature Spring

The aim is to acquaint the student, through classroom discussions and oral reports, with the principal currents and authors of Italian literature from the 16th century to the present. Staff

SI 353 Contemporary Italian Prose Spring

A study of representative Italian prose writers, from World War II to the present. Authors studied will include Pavese, Vittorini, Calvino, Pratolini, Bassani, and Sciascia. Staff

SI 550 Advanced Studies in Language and Literature Fall, Spring Staff

See also Division of Foreign Languages

Teacher Education Program

The Teacher Education Program, which is not a major, offers students opportunities to study educational issues and to prepare themselves as elementary or secondary school teachers. Upon graduation, students who have completed one of the programs described below and who are judged capable of fulfilling a public school teacher's responsibilities are certified to teach in the State of Vermont, whose certificate is recognized by the following states:

Alaska	Maine	Pennsylvania
California	Maryland	Rhode Island
Connecticut	Massachusetts	South Carolina
Delaware	Minnesota	South Dakota
Florida	New Hampshire	Utah
Hawaii	New Jersey	Vermont
Idaho	New York	Virginia
Indiana	North Carolina	Washington
Iowa	Ohio	West Virginia
Kentucky	Oklahoma	Wisconsin

The "initial professional certificate," granted by the State of Vermont to graduates who have successfully completed the Teacher Education Program, is probationary in nature. At the end of the first year, if the holder is teaching in Vermont or is a legal resident of Vermont, (s)he may renew the certificate through the State Department of Education. The certificate will not be renewed by Vermont except in these cases. Holders of the initial Vermont certificate who are teaching in another state must qualify for a regular professional certificate according to the requirements of that state.

Students interested in earning teacher certification should notify the Teacher Education office of their interest as early as they can, preferably by the spring of sophomore year. Planning ahead will avoid conflicts later on. Students should plan on devoting a full term (4 credits) to their practice teaching and their study of teaching methods.

Students normally undertake the following studies toward certification:

For elementary certification (K-6):

1) A one-term course on the methods and materials of teaching reading and mathematics at the elementary level (TE 305).
2) One term of college science or advanced placement in science.
3) One term course in the foundations of education (See description below).
4) An Internship, working with elementary students (See description below).
5) Problems and Methods of Education-Elementary (TE 404) and Practice Teaching Elementary (TE 405-406-407). (See description below.)

For secondary certification (7-12):

1) A major or its equivalent in a discipline which coincides with a subject taught widely in public secondary schools. The following majors do *not* coincide with subjects taught widely in public secondary schools; students who intend to major in these areas and to seek secondary certification should speak with Director of Teacher Education as early as possible in their college careers: Anthropology; Art History; Economics; Geography; Greek; Philosophy; Psychology; Religion; Sociology.
2) A one-term course in the foundations of education (See description below).
3) An Internship, working with secondary students (See description below).
4) Problems and Methods of Education-Secondary (TE 414) and Practice Teaching-Secondary (TE 415-416-417). (See description below.)

The Internship Requirement: (Freshmen, Sophomores, and Juniors)

1) may, but need not, be done in the Winter, and may, but need not, be done for academic credit. It must, however, be the equivalent of a Winter Term project in time and commitment, between 75 and 100 hours of work.
2) may, but need not, be done in an academic setting. In whatever setting it is done, it must be analogous to academic teaching in these respects:
   a) it must be part of an organized, supervised program;
   b) the intern must state in advance precisely what his goals are for the children he will work with;
   c) the intern must work with children in groups and the children must be roughly of the age level at which the Intern eventually intends to do practice teaching;
   d) there must be provisions for feedback from the children;
   e) the intern must evaluate the progress of the children, and be evaluated himself by an on-site supervisor.
3) must be done while one is in college.

The Foundations Requirement: (Freshmen, Sophomores, and Juniors) can be fulfilled by any of the following courses:

TE 215 The Immature Human Being: A Study of Childhood and Adolescence Fall

Childhood was not recognized as a distinct state of mind until modern times, and adolescence was not so recognized until the Twentieth Century. Some teachers still do not adequately recognize them. The purpose of the course is to help prospective teachers intellectually to distinguish and pedagogically to deal with the developmental stages of school-age people. The course will explore non-adult modes of human knowing and feeling with the help of such authors as: Freud, Montessori, Dewey, Piaget, Skinner, Bruner, Rogers, Gessell, and Erikson. Particular attention will be paid throughout to the implications of theory for pedagogy.
Mr. Jimenez

PY 225 Child Psychology Spring
(PY 105.) Mr. Prouty

PY 226 Psychology in Clinical and Educational Contexts Spring
(PY 105.) Mr. Ewell

SA 315 Sociology of Education Fall
Mr. Nye

Students are reminded that the foundations requirement can also be met by taking an appropriate Winter Term course, or by an approriate 500 project approved by a member of an academic department and/or by the Director of Teacher Education.

The Reading and Mathematics Requirement: (Elementary only: Juniors; Sophomores with special permission.)

TE 305 Methods of Teaching Elementary Mathematics and Reading Fall

Two six-week seminars: one on the materials and methods of elementary mathematics, the other on the problems encountered in the teaching of reading.
Mr. Callahan, Mr. Doyle

The Problems and Methods and Practice Teaching Requirements: (Seniors; Juniors with special permission.)

Students interested in applying for Problems and Methods and for Practice Teaching should obtain the application forms from the Teacher Education Office.

Applications are normally made near the middle of Spring Term for either term of the following school year. Students who will be abroad during the Spring Term prior to the desired time of Practice Teaching should contact the Teacher Education Office before their term abroad.

Students accepted for Practice Teaching should register for four courses in the same term, as follows:

	Problems & Methods	Practice Teaching
Elementary:	TE 404	TE 405-406-407
Secondary:	TE 414	TE 415-416-417

Descriptions of the above courses are as follows:

TE 404 Problems and Methods of Education—Elementary Fall, Spring

Lectures, discussion and readings pertinent to the general background, current trends, problems and methods of contemporary elementary education. Includes observation and teacher aide work at the local elementary schools. Taught concurrently with TE 405-406-407. Staff

TE 405-406-407 Practice Teaching—Elementary (K-6) Fall, Spring

A triple course in which each student teaches every day at a single grade level in a local elementary school and gradually shares responsibility for the activities of the classroom. Master teachers and college Supervisors of Student Teaching meet regularly with each student teacher to plan and evaluate his teaching. All students meet with the Supervisor of Student Teaching in a weekly seminar to study issues in elementary school teaching in light of their observations and experiences in the local schools. Staff

TE 414 Problems and Methods of Education—Secondary Fall, Spring

Particular attention will be given to the aims of secondary education, the design of a curriculum, organization of schools and classrooms, the nature of adolescents, and the importance of teaching methods. Each student will observe classes at the secondary level, write analytical papers, and design a teaching unit in the subject he intends to teach. Taught concurrently with TE 415-416-417.
Mr. Jimenez and Staff

FL 400 Language Learning: Theory and Practice (Language majors only)

TE 415-416-417 Practice Teaching—Secondary (7-12) Fall, Spring

A triple course in which, after observing classes, each student every day teaches three or four classes at local secondary schools and gradually shares most of the duties of his master teacher. Each student also participates in some of the co-curricular activities of his school and writes plans and evaluations of his teaching. Student teachers work under the close supervision of their master teachers and the Supervisors of Student Teaching. The principal purposes of this course are to help each student teacher develop criteria for evaluating his performance, to test his theories of teaching and learning and his ideas about the curriculum, and under the guidance of experienced teachers to begin to develop his own style of teaching.
Mrs. Thurber and Staff

Theatre

As a theatre major, a student will choose either the Acting/Directing or the Design/Production emphasis. All majors will normally elect the following courses in their freshman or sophomore year:

TH 141-2 Forms and Styles of Theatre: An Historical Approach

TH 245 Play Analysis, Preparation and Performance

TH 250 Scene Design

In consultation with their advisers, all majors will elect a minimum of two Production Seminars (TH 44x) and an intermediate independent project (TH 500). These courses along with the Senior program (1 course Fall, 1 course Winter) constitute the core curriculum for the Theatre major. In addition to this core of seven courses in the Theatre Department, students will elect the following courses according to their emphasis:

Acting/Directing	Design/Production
TH 146 Introduction to Acting	**TH 249 Theatre Design**
TH 326 Modern Drama	**TH 326 Modern Drama**
TH 346 Acting and Directing	**AR 101 Introduction to Art**
EL 322 Shakespeare	**EL 322 Shakespeare**
MU 140 Introduction to Dance	**2 additional courses in Art History**
	2 courses in Dramatic Literature

The Acting/Directing track requires a coordinate related field of appropriate courses to be determined by the student's adviser in the following areas (select one area):

American Literature: four courses
Art: four courses, two of which may be studio
English: four additional courses in English literature one of which may be dramatic literature
History: four courses
Languages: (fluency required) four courses of a cultural or literary nature
Philosophy: four courses
Religion: four courses

The senior program (TH 700) will be a two-term, advanced independent project, planned in consultation with the student's adviser, and normally will be elected during the Fall and Winter Terms.

Certain cognate courses are *strongly recommended* as follows:

Acting/Directing	Design/Production
AR 101 Introduction to Art	**AR 209-10 Introduction to Design**
MU 101 Introduction to Music	**MU 101 Introduction to Music**
PA 233 Art and Philosophy	**1 other term of studio art**
1 other term of dance	

TH 141 Forms and Styles of Theatre: An Historical Approach Fall

A study of the written drama and of the theatres and staging of several periods of great theatrical vitality between 5th Century Greece through 18th Century Europe. Staff

TH 142 Forms and Styles of Theatre: An Historical Approach Spring

An examination of playwrights, directors, designers and producers who established the patterns of nineteenth and twentieth century theatre. Staff

TH 146 Introduction to Acting Fall, Spring

An introduction to acting as an art. A study of the actor's approach to the creative process from analysis to performance. Emphasis on concentration; imagination; and communication by means of voice, gesture and movement. Classroom exercises and scene work. Use of video and tape recordings for self evaluation where feasible. Staff

[**TH 235 19th Century Drama**]

TH 245 Play Analysis, Preparation and Performance Fall

A study based on analysis of the play and selection of a pervasive metaphor. Determination of the performance area, characterizations and action based on this study. Direction of scenes for classroom analysis. Mr. Volkert

TH 249 Theatre Design Fall

A series of readings, discussions, exercises and projects in which historical and contemporary approaches to mounting plays are examined. Emphasis is on stage/auditorium forms and equipment. (In TH 250 emphasis is on scenic forms and styles as expressive, interpretative elements in production planning.) Mr. Potter

TH 250 Scene Design Spring

A series of readings, discussions ,exercises and projects in which historical and contemporary approaches to mounting plays are examined. Emphasis is on scenic forms and styles as expressive, interpretative elements in production planning. (In TH 249 emphasis is on stage/auditorium forms and equipment.) Mr. Potter

[**TH 251 Costume Design**] To be offered in Spring 1977.

[**TH 252 Lighting Design**] To be offered in Fall 1976.

[**TH 326 20th Century Drama**]

TH 327 American Drama Fall

A study of American Drama as revealed in the plays of our most innovative playwrights. A detailed examination of O'Neill, Saroyan, Wilder, Williams, Miller, and Albee and a brief review of other significant contributors. This study will focus on the works of these authors as living theatre. Mr. Volkert

TH 346 Acting and Directing Spring

An exploration of modern approaches to interpreting a play on stage. Experimental work with actors and directors to find the best approach to the creative association of the play, the director, the actor, the audience. From this course 500 projects or senior projects may be developed. (TH 245 or permission: preference will be given to upperclassmen.) Mr. Volkert

TH 415 Seminar: Directing and Acting—Dramatic Repertoire Spring

An examination of little known historical, modern, avant garde and new plays (by new playwrights) as to challenge and suitability for modern production. Experiments in interpretation will be conducted in the classroom. Mr. Volkert

A Production Seminar is offered in conjunction with each major production. The cast and staff are selected following try-outs and interviews prior to registration.

TH 441 Production Seminar: Acting/Directing Fall
Mr. Volkert

TH 442 Production Seminar: Design/Production Fall
Staff

TH 443 Production Seminar: Acting/Directing Spring
Staff

TH 444 Production Seminar: Design/Production Spring
Staff

TH 500 Intermediate Independent Project: submit proposal to project adviser two weeks prior to registration. Staff

TH 700 Senior Project: all seniors register for one unit each in the Fall and Winter term. Staff

See also Division of Humanities.

Program of Military Science

The objective of a Senior Division Army Reserve Officers' Training Corps (ROTC) unit, organized under the provisions of the National Defense Act of 1916 and amendments thereto, is to provide a program which will attract, motivate, and prepare selected students with potential to serve as commissioned officers in the Army Reserve or Regular Army. The ROTC curriculum at Middlebury provides a flexible program of instruction designed to complement the student's civilian goal of acquiring a baccalaureate degree in a course of study of his choosing by enabling him to develop those attitudes and qualities that will facilitate transition to military service. The program includes a two-year basic course offered during freshman and sophomore years, and a two-year advanced course offered during junior and senior years. Credit for previous active duty military service and ROTC training will be granted in accordance with current Department of the Army regulations. Uniforms, books, and equipment are furnished by Department of the Army at no cost to the student.

The Program of Military Science will be discontinued at Middlebury College at the end of the 1976-77 academic year.

The Basic Course

MS 21 Sophomore Basic (Military Science II) Fall

Applied Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours per semester). (MS 11, MS 12 or permission.)

ROTC Staff

MS 22 Sophomore Basic (Military Science II) Spring

Applied Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours per semester). (MS 11, MS 12, MS 21.)

ROTC Staff

The Advanced Course

Students enrolled in the advanced course will receive a subsistence allowance of $100.00 per month. Department of the Army also purchases for each advanced course student a regulation Army Officer uniform. This is worn during leadership laboratory and is retained by the student upon his graduation.

Attendance at one advanced summer camp of six weeks duration is mandatory. During attendance the student is paid $317.10 per month. Mileage rate is paid from home of record in Continental United States to camp and return. Students will attend camp between their junior and senior years, but deferment to the next summer may be made, for a cogent reason, when approved by the DMS.

The ROTC student is given a general military science course which does not emphasize any one branch of the Army. Prior to commissioning, assignment to a branch will be made based on existing Army quotas and the individual's desires and capabilities.

Students who enroll in the Advanced Course must agree to complete ROTC training, unless circumstances beyond their control make it impossible to do so. Students must agree to accept a commission, if it is offered, and to serve on active duty in the Army for a period of two years.

Commissioning Requirements. Once a student is enrolled in the Advanced Course, he must satisfactorily complete the following to be eligible for a commission as a Second Lieutenant:

a. Education: Receive a baccalaureate degree.
b. Military Training: (1) Complete all military courses for the Senior Division ROTC; (2) Complete ROTC Advanced Summer Camp; (3) Be recommended for appointment by the President of the College and the Director of Military Science.

Upon successful completion of the above requirements, the student is commissioned as a Second Lieutenant, U.S. Army Reserve. Outstanding military students are eligible for a direct commission in the Regular Army upon graduation. Graduates then report to active duty within the first twelve months following their commissioning. Those who desire to attend graduate school may be deferred from active duty for the duration of their graduate study, but not to exceed 24 months. Exceptions to this policy will be granted to students pursuing advanced study in the healing arts, ministry and the legal profession.

MS 31 First Year Advanced Course (Military Science III) Fall

Advanced Leadership and Management (two hours each week) and Leadership Laboratory (six hours per semester). (MS 11, MS 12, MS 21, MS 22 or served on active duty in the Armed Forces for one year, or successfully complete a six-week basic summer camp prior to the junior year of college, and be selected by the DMS.) ROTC Staff

MS 32 First Year Advanced Course (Military Science III) Spring

Advanced Leadership and Management (two hours each week) and Leadership Laboratory (six hours per semester). (MS 31.) ROTC Staff

MS 41 Second Year Advanced Course (Military Science IV) Fall

Theory and Dynamics of the Military Team and Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours per semester). (MS 31, MS 32.) ROTC Staff

MS 42 Second Year Advanced Course (Military Science IV) Spring

Theory and Dynamics of the Military Team and Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours per semester). (MS 41.) ROTC Staff

ROTC Flight Program. This program is available to selected cadets in their senior year at no cost to the cadet. The student is given 35 hours of ground school and 36 hours of flight instruction. Successful completion of this program qualifies the individual for a Federal Aviation Agency Private Pilot's License.

Calendar for 1975-76

JULY

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..
..	..	..	..	..	..	..

AUGUST

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

SEPTEMBER

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	..	..	..	..

OCTOBER

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..

NOVEMBER

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
..	..	..	..	..	..	..

JANUARY

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	..	..	..	..	..	..

MARCH

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..

APRIL

S	M	T	W	T	F	S
..	..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..

MAY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	..	..	..
..	..	..	..	..	..	..

1975

SEPTEMBER

3—Wednesday, Freshman Week begins

8—Monday, Fall Term Classes begin (8 a.m.)

OCTOBER

11—Saturday, Alumni Homecoming Day (College in session)

13-14—Monday, Tuesday, Mid-Term Recess

18—Saturday, Parents' Weekend (College in session)

NOVEMBER

1—Saturday, 175th Anniversary Convocation

20—Thursday, College Meeting Night

25—Tuesday, Thanksgiving Recess begins (5 p.m.)

DECEMBER

1—Monday, Classes resume (8 a.m.)

6—Saturday, Fall term Classes end (12 noon)

8—Monday, Reading Period begins

11—Thursday, Final Examinations begin

16—Tuesday, Final Examinations end, Christmas Recess begins

1976

JANUARY

7—Wednesday, Winter Term begins (8 a.m.)

FEBRUARY

6—Friday, Winter Term ends (12 noon), Winter Recess begins

16—Monday, Spring Term Classes begin (8 a.m.)

26—Thursday, Winter Carnival Recess begins (5 p.m.)

MARCH

1—Monday, Classes resume (8 a.m.)

APRIL

3—Saturday, Spring Recess begins (12 noon)

12—Monday, Classes resume (8 a.m.)

22—Thursday, College Meeting Night

MAY

15—Saturday, Spring Term Classes end (12 noon)

17—Monday, General Examinations and Reading Period begin

21—Friday, Final Examinations begin

26—Wednesday, Final Examinations end

30—Sunday, Baccalaureate and Commencement